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Design Thinking Portfolio

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Design Thinking **Portfolio**

Name

Semester (example: fall 2021)

There is no textbook for this course. Listed below are the provided learning materials.

- 1. Enter the required work in the (PDF) **Portfolio** (this document).
- 2. Read the **Announcements** on MU Online often.
- 3. Refer to the **Schedule** on MU Online for due dates.
- 4. Refer to the **Syllabus on** MU Online for other requirements.
- 5. Refer to the learning materials on **MU Online**.

Fill out the two green boxes above and save this file as a PDF. Name the file with your last name, first name, middle initial and portfolio. (Example: IngersollChrisRPortfolio) Keep your file in two places, download one onto your computer and use that one to work on and after every session you work on your file, upload it to your cloud. Always open the file once uploaded to your cloud make sure it is the correct one. OneDrive (see Blackboard) is provided to you by MU. If something goes wrong, for example you have trouble with your computer, you will have the cloud file as a backup. This will prevent you from having to do the work over again. Save your file often as you work on it. Every time you save the file it will be saved to that point. This could also save you a good deal of work if something happens. Make sure to override the file in the cloud each time you are done making changes to the file on your computer. The workbook is your main grade for the semester. Not completing the workbook, or loosing your file, can result in a failing grade. Learning the responsibility of digital assets management is not only part of the course, but a valuable skill for your future. Once you have completed page 1, save the file, name it according to the directions above, guit the file, and then reopen the file. Is the content you added there? If so, drag and drop a copy of your file to your OneDrive. Always check your file before submitting for a grade to make sure it is the work you wish to submit. Don't rush. Be thoughtful. It is an excellent skill to have.

The file you submit for a grade MUST be a PDF. Contact the graduate assistant or the professor if you are having trouble with using or saving the PDF.

Credits

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Design Thinking Portfolio

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Date of Publication 8-20-2021.

Note

Pages 71 and 72 fall under a different Creative Commons license. All pertinent information regarding that license appears on both pages.

ISBN: 978-0-9837621-9-5

Acknowledgments

The author wishes to kindly thank the Marshall University Libraries and Professor Larry Sheret, Scholarly Communication & Open Educational Resources Librarian, for editing and copyrighting support.

This work is supported with a Open Educational Resource grant from the West Virginia Higher Education Policy Commission and West Virginia Community and Technical College System.

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Pages with **Team** are to be completed as a team. ALL other pages are to be completed by you and you only. Your grade is heavily based on YOUR work and a portion is based on your ability to work in a team. Team pages can look similar, the rest of the pages should not. The work is first done by you and then you bring your knowledge to the team. The team then uses everyone's knowledge to produce a better result.

Resources

Videos

Innovation 101 Series, University of New South Wales

Innovation 101 Ep1: Just Do It! https://youtu.be/dZTjD3g4C1A

Innovation 101 Ep2: Idea Validation https://youtu.be/EYggp2fQLlc

Innovation 101 Ep3: Building Your Team https://www.youtube.com/watch?v=WzmKqWSxUwU&t=2s

Innovation 101 Ep4: Prototyping & Testing - Physical Products https://youtu.be/2PzT0aAi9Lw

Innovation 101 Ep5: Prototyping & Testing - Websites and Apps https://youtu.be/MIq7v98AqiQ

Innovation 101 Ep6: Prototyping & Testing - Social Enterprises https://youtu.be/MKIKVe9CF-Y

Innovation 101 Ep7: Organisation Structure - For Profit https://youtu.be/2x3r_Bol77s

Innovation 101 Ep8: Organisation Structure - Not For Profit https://youtu.be/Pa9rPDmjq2A

Innovation 101 Ep9: Legal Considerations https://youtu.be/Hh5HC1ew6v0

Innovation 101 Ep10: Financing Your Project https://youtu.be/0M8T3-bzrvY

Innovation 101 Ep11: Iteration https://youtu.be/DU-SISvaTak

Innovation 101 Ep12: Getting to Market - Commercial Products https://youtu.be/K_vblziTtd8

Innovation 101 Ep13: Getting to Market - Educational Products https://youtu.be/t7FDMLy5rvI

Innovation 101 Ep14: Getting to Market - Social Enterprises https://youtu.be/ROGk8yZQozI

Books

Brown, Tim. Change by Design. Harper Business 2009.

- Burnett, Bill and Evans, Dave. *Designing Your Life: How to Build a Well-Lived Joyful Life*. Knopf, 2016.
- Kelley, Tom, and David Kelley. *Creative Confidence: Unleashing the Creative Potential Within Us All*. William Colliins. 2014.

Journals

Standford Social Innovation Review https://ssir.org/

Web Sites

Start Some Good https://startsomegood.com/

Why Design Thinking?

Design thinking is an innovative mindset for solving problems based on empathy and tested through desirability, viability and feasibility.

Problems: What if? Empathize: Gather knowledge **Define**: Frame the right problem Ideate: Develop many solutions Experiment: Iterate rapidly, learn and reframe Pitch: Tell the story, prove the value

Design thinking is not a linear process. Pages completed in this Portfolio on one date may be adjusted several weeks later.

"Framing the right problem is the only way to create the right solution." (IDEO.com)

Social and Civic Entrepreneurship

"A social enterprise is a cause-driven business whose primary reason for being is to improve social objectives and serve the common good."

"Sustainable revenue differentiates a social enterprise from a traditional charity that relies on outside funding in the form of donations or grants to achieve its social mission."

(https://www.thegoodtrade.com/features/what-is-a-social-enterprise)

"Social entrepreneurship is the process by which individuals, startups and entrepreneurs develop and fund solutions that directly address social issues. A social entrepreneur, therefore, is a person who explores business opportunities that have a positive impact on their community, in society or the world."

(https://www.uschamber.com/co/start/startup/what-is-social-entrepreneurship)

The Challenge

This semester, you will learn design thinking through a social or civic entrepreneurship challenge. This portfolio will not only walk you through the process, but also serve as an artifact of your abilities to apply design thinking to a complex problem. Though we will be tackling a social or civic problem specifically related to Appalachia, the mindset of design thinking applies to all disciplines.

Constraints for this challenge:

- 1. Must be a social or civic problem (select from the list to the right) related to Appalachia that is beneficial to communities outside of your own.
- 2. It must be a product or service that is sold by a business that is sustainable.
- 3. The mission of the business must have a positive social or civic impact.
- 4. The business must connect to the social or civic cause.

Social Issues to Consider

Poverty Population loss Infrastructure Education Unemployment Social stratification The environment Health care

Civic Issues to Consider

Volunteerism Community engagement Organizational involvement Electoral participation

8

Podcast Directions

1. Go to *How I Built This with Guy Raz*. (https://www.npr.org/podcasts/510313/how-i-built-this) and download the podcast app to a device of your choosing.

 Review the definitions of design thinking elements below.
empathy considers the human experience as if "standing in the shoes of others." (Brown page 55)

user needs asks what does the user wish to do with this product or service and why do they wish to do this?

insights are an understanding of a person's emotion, behavior or belief as it relates to the product or service.

prototyping is creating a sample of a product or system to test how it will work and what needs to be changed to make it better. "David Kelley calls prototyping 'thinking with your hands'..." (Brown pages 94 and 95)

3. Select one episode from How I Built This with Guy Raz that is of particular interest to you.

4. First indicate the element and then give evidence of that element that you found in the podcast (see sample below right). Fill all 3 boxes with one element each. If you see evidence of one element more than once, you can indicate the same element in more than one box.

Take the time to listen to the podcast carefully. Much can be learned from the stories these successful entrepreneurs tell. Try not to focus on the money made, it can be pretty impressive, but on what made the product or service successful. The form for podcast 1 is located on the next page and the other required podcast are placed in the portfolio where they need to be done. Do not sweat the first podcast, enjoy what you will learn from listening to it. As we move through the course, and learn more about design thinking, the expectations for the podcasts will rise. There are a total of 4 podcasts to be completed in this course. Do them only as we reach them in the workbook. I encourage you to listen to several podcasts with your team and then discuss what all of you discovered as long as the content in the workbook is your own. Keep this in mind, the grades earned in the workbook are yours and yours alone. If there is too much similarity with other workbooks, points will not be awarded.

Problem source 1 Sample

Citation

Kelley, Tom, and David Kelley. Creative Confidence: Unleashing the Creative Potential Within Us All. William Collins, 2014.

Type of Source

Paperback book (NOTE: under notes include quotes where it is the exact words and no quotes where it is your own words. Helps in avoiding plagiarism.

Where Found

Personal library (NOTE: you can copy and paste information from this form into your abstract if you take the time to do it properly)

Credible Source and Why?

Both authors are well known experts in the field of design. https://www.ideo.com/people/david-kelley https://www.ideo.com/people/tom-kelley (NOTE: Links to their bios. All the information in this form is to help both the team and yourself develop strong problems, solutions and prototypes as well as help you to write a strong, evidence supported abstract. Giving links and page numbers will help in finding this information again.)

Notes

Strategies: "1) choose creativity 2) think like a traveler 3) engage relaxed attention 4) empathize with your end user 5) do observations in the field 6) ask questions, starting with why? 7) reframe challenges 8) build a creative support network" [pgs. 74 + 75]

Practices that may translate: "new behaviors - map out tasks and timing for every role in order to minimize the need for conversation. Checklist to relay key information. Reduced technical errors by 42% and info errors by 49%" (pg. 82)

Reframing Techniques: "1) step back from obvious solutions 2) Alter your focus or point of view 3) uncover the real issue 4) look for ways to bypass resistance or mental blocks 5) think about the opposite" (pgs. 101 + 102)

Quanity to Get Quality: story on ceramic grade proving making more results in better results rather than working on only one perfect prototype (pg. 123)

Book: War on Art by Steven Pressfield - beating procrastination (pg. 124)



Podcast 1

Title of Episode

Date Episode Aired

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Select one Empathy, User Need, Insight or Prototyping

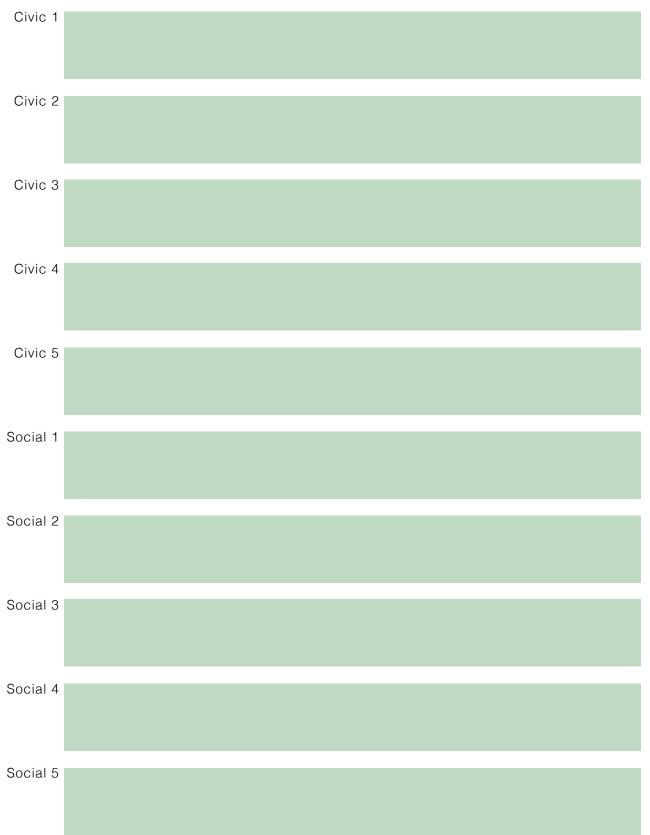
State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Empathy

Compile 10 Things You Wish Were Better There must be ten (10) individual and clear wishes. Five (5) civic and five (5) social. Start your sentence with what if?



Select a Wish

From your list, select the wish you feel most connected to and tell us about it in more detail. This is the wish you will present to your team.

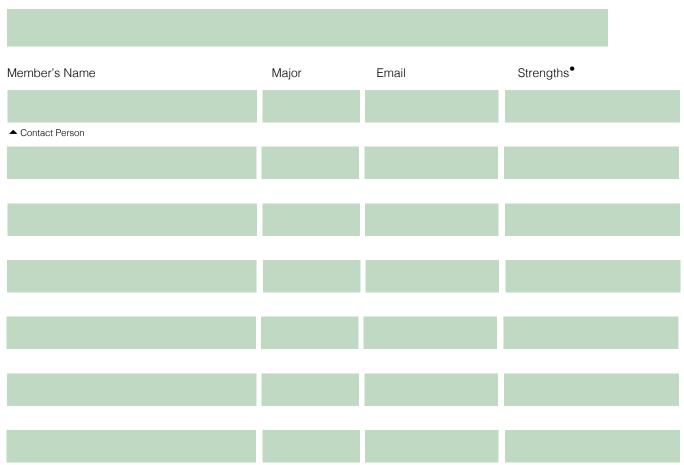
Define a Problem

Rewrite the wish as a problem. Make sure it is a problem and not a solution.

Indicate which social or civic issue your problem falls under: **Social:** Poverty, population loss, infrastructure, education, unemployment, social stratification, the environment or health care. **Civic:** Volunteerism, community engagement, organizational involvement or electoral participation.

Team: Become a Team

Team Name



• Under strengths list what this member is offering to bring to the team. Examples: Detail oriented, organized, excellent writing, artistic, carpentry, etc. Use this information to help with determining roles. List the first Member as the contact person for the team. This person (determined by a vote) will keep the team informed and serve as the main contact for the professor and graduate student.

Create user persona cards. Google <user persona templates> for ideas. Include on your cards information that will help your team know each other and each other's strengths, likes and pain points. Respect each other's privacy. Do not ask personal questions or require information that someone does not wish to provide. Some information could be: 1. A photo 6. Pain points

- 2. Short bio
- 7. Strongest skills
- 3. Favorite quote
- 8. Weakest skills
- 4. Goals
- 9. Reading habits
- 5. Core needs
- 10. Motivations or others the team feels good to do

Qualities of a Good Team

- 1. Have a clear team purpose.
- 2. Welcome collaboration and be all inclusive.
- 3. Communicate frequently and constructively.
- 4. Understand everyone's role and hold yourself accountable.
- 5. Encourage different ways of thinking.

Give the details on how the team will communicate.

- 6. Manage conflict by looking at all sides.
- 7. Measure the progress and stay on target. Be reliable.
- 8. If it is a good idea, give it some time. Be confident.
- 9. Celebrate success!

Team: Gather All the Team's Problems

List below each team member's individual problem from page 11 (one per box). From this list debate the value of each problem and then select the one the team feels is the most valuable to solve. The Team's problem should be rewritten with input from all the team members. Do not just copy and paste the original. Think it out as a team. MAKE SURE it is a problem and not a solution. Also consider if it is truly a problem. Take care in this step. This will be the problem you will focus on for the semester.

Team: Select the Right Problem. This will be the problem the team will solve.

Indicate which social or civic issue your problem falls under: **Social:** Poverty, population loss, infrastructure, education, unemployment, social stratification, the environment or health care. **Civic:** Volunteerism, community engagement, organizational involvement or electoral participation.

Podcast 2

Title of Episode

Date Episode Aired

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Research the Problem

Each team member is responsible for finding **THEIR OWN** sources. As a team, decide what area each team member will research so you have more depth and less overlap. The more research your team comes to the table with, the greater your chances of finding the right problem. Keep in mind, each workbook is graded on its own merit. You may be working as a team, but the work in this workbook must be your own on the pages not marked as **TEAM**, and the grade this workbook earns is yours alone. Do not copy from each other. Information on what is needed for each section is below. Where you enter your research (a page for each source) starts on the next page. Fill out the forms with an honest consideration for creating good work. The forms will serve you well at the end of the course in writing the abstract.

Citation: Use **KnightCite** or a similar program and paste the source's citation in the box provided. This will make writing your abstract MUCH easier.

Use MLA or APA style guides according to your discipline.

URL: Include the URL in your citation where applicable. This will make it easier to find the information again.

Type of Source: Indicate what type of source - book, article, film, website, pamphlet, podcast, etc.

Where Found: Indicate online, library database, Drinko library stacks, special collections, headquarters office, etc. Think about what you information you would need to find it again or if you needed to send someone else to locate it.

Credible Source and Why? Write, in a few sentences, why this source is reliable.

Notes: It is **VERY IMPORTANT** to make notes in this area of the information you found in the source that will help you in solving your team's problem. Notes should be details that can be used in writing an abstract. **DO NOT** write general information about the source. This content will be key to writing your abstract later in the course and save you a great deal of work. Trust me on this one.

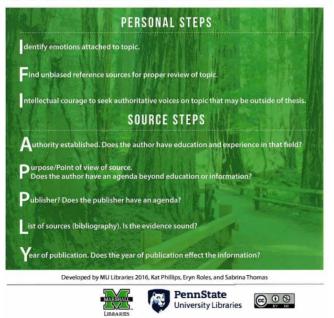
Complete a Minimum of 5 Sources.

If you would like to complete more than the 5 required sources use the additional individual pages.

IF I APPLY SOURCE EVALUATION TOOL

Often we seek information that confirms our own thoughts and feelings towards a topic. This is not research. Research and learning comes from finding sources that speak to the truth of a topic, no matter how uncomfortable it is.

Only by keeping personal biases in check can you begin to vet information for credibility. These steps will help you find sources that are credible and reliable in your research process.



Problem source 1 Sample

Citation

Kelley, Tom, and David Kelley. Creative Confidence: Unleashing the Creative Potential Within Us All. William Collins, 2014.

Type of Source

Paperback book (NOTE: under notes include quotes where it is the exact words and no quotes where it is your own words. Helps in avoiding plagiarism.

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Notes

Strategies: "1) choose creativity 2) think like a traveler 3) engage relaxed attention 4) empathize with your end user 5) do observations in the field 6) ask questions, starting with why? 7) reframe challenges 8) build a creative support network" [pgs. 74 + 75]

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Notes

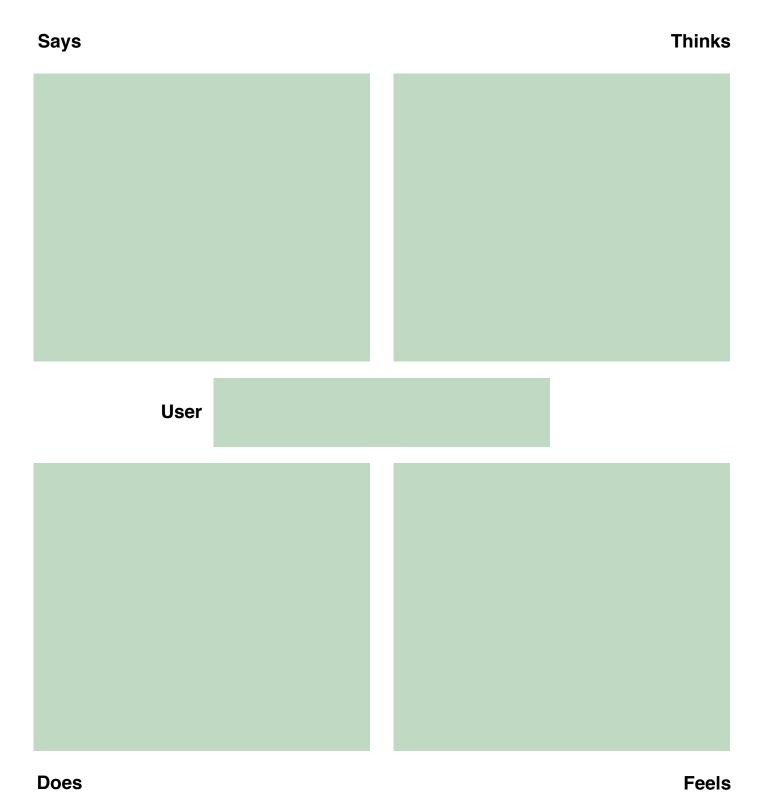
If you would like to complete more than the 5 required sources, use the additional individual problem source pages.

Compile the Best of Your Problem Research Evaluate all of your research and list the strongest information found related to the problem.

Team: Compile the Best of the Team's Problem Research Evaluate each team member's research and list the strongest information found related to the problem.

Create an Empathy Map

Using what you have learned thus far, consider which users are connected to this problem and develop an empathy map. As you proceed with the challenge, the information you discover can be added to this map to achieve a better understanding of the user.



Credit: NNGROUP.COM NN/g



Requirements

	File is named precisely as directed on page 1 (15 pts)
	Compile 10 Things You Wish Were Better shows serious thinking (up to 15 pts)
	All 3 sections of Podcast 1 identifies an element and supplies evidence* (up to 15 pts)
	Page 12 states a problem and not a solution (up to 15 pts)
	All 3 sections of Podcast 2 identifies an element and supplies evidence* (up to 15 pts)
	Page 14 precisely states the same problem in all team members portfolios (up to 15 pts)
	Page 14 states a problem and not a solution (up to 15 pts)
	Problem Source Research is complete (contains proper citations + in-depth notes) (up to 15 pts)
	All sections, on each page, are fully completed (contains enough serious content) (up to 15 pts)
	Work submitted shows quality (directions followed, clear writing and few, if any, typos) (up to 15 pts)
	There is not enough work demonstrated in the Portfolio to grade (0 pts)

Total (150 pts)

Feedback

As the course progresses and you learn from practice, expectations for the portfolio will increase.

*Podcast Evidence

Shows a good understanding of the element.

Precise

Marked by exactness. (New Oxford Dictionary)

Serious

Demanding careful consideration or application. .(New Oxford Dictionary)

Evidence

The available body of facts or information indicating whether a belief or proposition is true or valid.. (New Oxford Dictionary)

Expectation

A belief that someone will or should achieve something. (New Oxford Dictionary)

Inspiration

Team: Identify the Users and Stakeholders









Conducting Your Interview

Talking with experts, people connected to the problem and users or stakeholders can provide valuable insights to help solve the problem. There needs to be some work done before the interview in order to come away with the best information. The following pages will help prepare you for that interview.

Interview Tips

Do your homework. Know as much as you can about the person before you interview them.

Go into the interview with a clear vision of what is possible. If they are an expert in a field related to your problem make sure you are seeking information that is particular to their expertise and not common knowledge.

Make sure they are the right person to interview. Try to make the appointment as quickly as you can. Send a confirmation email with the date, time, method or place.

Send an email introducing yourself and tell them the purpose for the interview request.

Ask if they wish an interview through email, phone or video conferencing. If they and you are both wishing and willing to do face-to-face take all the proper precautions.

Respect their time. Do not be late, and set things up properly.

Do not ask question that can be easily found through conducting enough sresearch.

Do not ask biased questions.

Ask only one question at a time.

If the person does not want to talk about something, respect that and move on to the next question.

Make sure the questions are clear and concise.

Make sure the questions relate to your problem and/or your solution. Stay on topic during the interview.

Keep careful notes and include them in your Portfolio.

Recording an interview requires the permission of the person being interviewed. Record this permission. Check state laws for other permissions required. Transcribe the recording and look for pertinent information or insights. Enter these in your Portfolio.

Send an email thanking the person for the interview. Mailing a thank you note can be a special way of thanking that person.

Select 3 Possible People to Interview

Name of Person to Interview and Their Connection to the Problem

What Makes this Person a Good Interview?

Name of Person to Interview and Their Connection to the Problem

What Makes this Person a Good Interview?

Name of Person to Interview and Their Connection to the Problem

What Makes this Person a Good Interview?

Interview Research

Decide which person from the previous page is the best person to interview. First, do your homework and find out if any of the questions you need to ask are already answered for you by doing a Google search. Find out as much about the person you are going to interview as possible. You do not want to ask them questions that are common knowledge. Respect their time. Find their contact information. Start with an email and ask politely for either a phone, video conference, in-person or email interview. Let them choose the day, time and method that is best for them. **Give their name, title and how you will contact them below then use the remaining space to provide notes about the person from your research.**

Interview Question 1

Name of Person Interviewed

Question to Ask

Response to Question

Interview Question 2

Name of Person Interviewed

Question to Ask

Response to Question

If you would like to ask more than the 2 required questions use the additional individual interview pages.

Evaluate Your Interview

Take everything you learned from the interview and narrow those findings to the most valuable.

Team: Compile the Team's Interviews Meet with your team and list all the most valuable interview findings from everyone's interviews.

Conduct Your Observation

Plan and conduct an observation to find opportunities for the best solution and to confirm the problem is still the right problem.

Observation Tips

When choosing an observation: What do you want to learn?

When conducting an observation: What do you see? How does it feel? Do you see patterns or similarities? Is anything out of place? What strikes you as unusual? What questions would you like to ask? Use the rose, thorn and bud method.

Select 3 Possible Observations

Identify possible observation 1

Be descriptive as to how you will conduct this observation.

Identify possible observation 2

Be descriptive as to how you will conduct this observation.

Identify possible observation 3

Be descriptive as to how you will conduct this observation.

Select and Conduct Your Observation

Decide which observation from the previous page is the most valuable and conduct that observation.

How the Observation was Conducted

Things Learned from the Observation

If you would like to conduct more than the one required observation use the additional observation individual pages.

Evaluate Your Observation

Take everything you learned from the observation and narrow those findings to the most valuable.

Team: Compile the Team's Observations

Meet with your team and list all the most valuable interview findings from everyone's observations.

Podcast 3

Title of Episode

Date Episode Aired

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Refine

Team: Is It Still the Right Problem?

Meet with your team and debate your original problem. Does it need tweaking? Provide notes on the team's discussion below. At the end of your notes, clearly state if the problem is now revised and include that updated problem in the problem box. If the problem has not changed enter that problem in the new problem box.

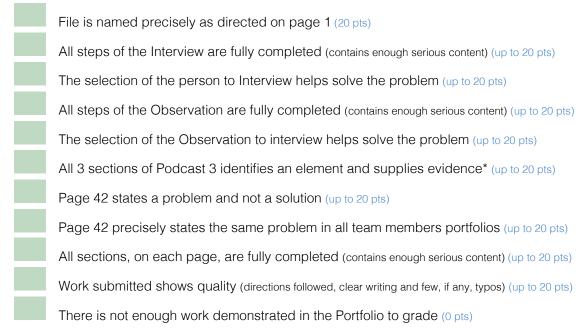
	_	_	
Problem	Problem remains the same	Problem is updated	

Team: Select Constraints

Meet with your team and finalize the constraints the team will need to use.



Requirements



Total (200 pts)

Feedback

As the course progresses and you learn from practice, expectations for the portfolio will increase.

*Podcast Evidence

Shows a better understanding of the element.

Precise

Marked by exactness. (New Oxford Dictionary)

Serious Demanding careful consideration or application. .(New Oxford Dictionary)

Evidence

The available body of facts or information indicating whether a belief or proposition is true or valid.. (New Oxford Dictionary)

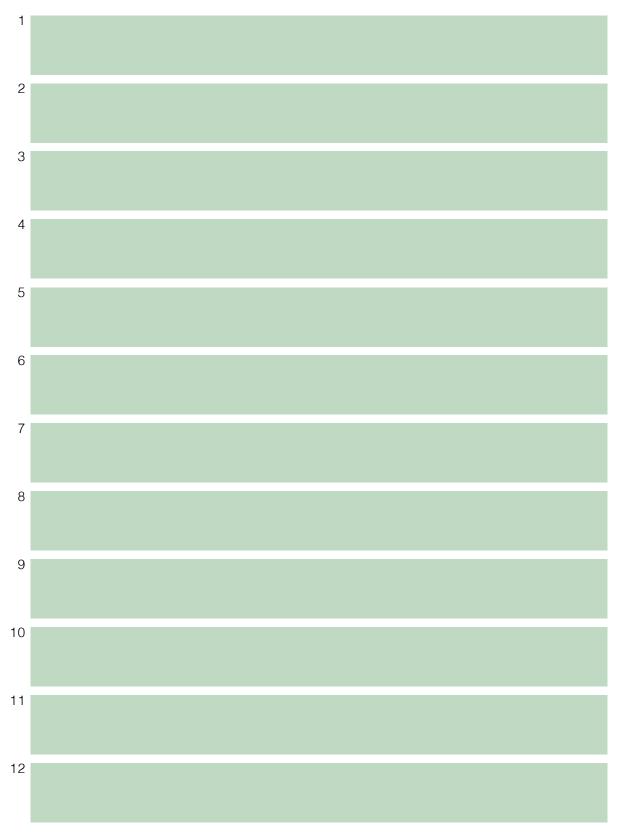
Expectation

A belief that someone will or should achieve something. (New Oxford Dictionary)

Ideation

List 12 Possible Solutions

There must be 12 individual and clear solutions of your own. Brainstorm with your team to help improve your solutions.



Researching Possible Solutions

Each team member is responsible for finding **THEIR OWN** sources. As a team, decide what area each team member will research so you have more depth and less overlap. The more research your team comes to the table with, the greater your chances of finding the right problem. Keep in mind, each workbook is graded on its own merit. You may be working as a team, but the work in this workbook must be your own on the pages not marked as **TEAM**, and the grade this workbook earns is yours alone. Do not copy from each other. Information on what is needed for each section is below. Where you enter your research (a page for each source) starts on the next page. Fill out the forms with an honest consideration for creating good work. The forms will serve you well at the end of the course in writing the abstract.

Citation: Use KnightCite or a similar program and paste the source's citation in the box provided. This will make writing your abstract MUCH easier.

Use MLA or APA style guides according to your discipline.

URL: Include the URL in your citation where applicable. This will make it easier to find the information again.

Type of Source: Indicate what type of source - book, article, film, website, pamphlet, podcast, etc.

Where Found: Indicate online, library database, Drinko library stacks, special collections, headquarters office, etc. Think about what you information you would need to find it again or if you needed to send someone else to locate it.

Credible Source and Why? Write, in a few sentences, why this source is reliable.

Notes: It is VERY IMPORTANT to make notes in this area of the information you found in the source that will help you in solving your team's problem. Notes should be details that can be used in writing an abstract. DO NOT write general information about the source. This content will be key to writing your abstract later in the course and save you a great deal of work. Trust me on this one.

Complete a Minimum of 5 Sources.

If you would like to complete more than the 5 required sources use the additional individual pages.

IF I APPLY SOURCE

Often we seek information that confirms our own thoughts and feelings towards a topic. This is not research. Research and learning comes from finding sources that speak to the truth of a topic, no matter how uncomfortable it is

Only by keeping personal biases in check can you begin to vet information for credibility. These steps will help you find sources that are credible and reliable in your research process.





Problem sourcSample

Citation

Kelley, Tom, and David Kelley. Creative Confidence: Unleashing the Creative Potential Within Us All. William Collins, 2014.

00

Type of Source

Paperback book (NOTE: under notes include guotes where it is the exact words and no quotes where it is your own words. Helps in avoiding plagiarism

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https://www.ideo.com/people/tom-kelley (NOTE: Links to their bios. All the information in this form is to help both the team and yourself develop strong problems, solutions and prototypes as well as help you to write a strong, evidence supported abstract. Giving links and page numbers will help in finding this information again.)

Notes

Strategies: "1) choose creativity 2) think like a traveler 3) engage relaxed attention 4) empathize with your end user 5) do observations in the field 6) ask questions, starting with why? 7) reframe challenges 8) build a creative support network" [pgs. 74 + 75]

Practices that may translate: "new behaviors - map out tasks and timing for every role in order to minimize the need for conversation. Checklist to relay key information. Reduced technical errors by 42% and info errors by 49%" (pg. 82)

Reframing Techniques: "1) step back from obvious solutions 2) Alter your focus or point of view 3) uncover the real issue 4) look for ways to bypass resistance or mental blocks 5) think about the opposite" (pgs. 101 + 102)

Quanity to Get Quality: story on ceramic grade proving making more results in better results rather than working on only one perfect prototype (pg. 123)

Book: War on Art by Steven Pressfield - beating procrastination (pg. 124)

Citation (include web link is applicable)

Type of Source

Where Found

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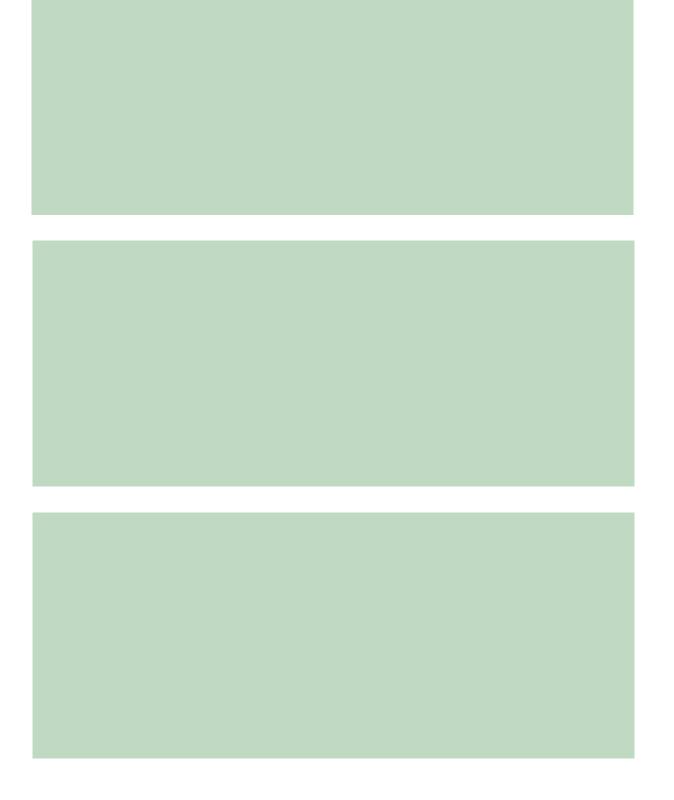
Credible Source and Why?

Compile the Best of Your Solution Research Evaluate all of your research and list the strongest information found related to a possible solution.

Team: Compile the Best of the Team's Solution Research Evaluate each team member's research and list the strongest information found related to the possible solution.

Team: Consider 3 Possible Solutions

As a team, take all the solutions presented by all team members and narrow them to the best 3.



Team: Select the Best Solution

First **state the problem**. Then give the **best solution** from the 3 solutions you just explored. Be brave, but be smart. Your solution will be tested as we get further into the workbook. Indicate **why,** at this stage, you think it is the right solution.

Problem (team selected and the same for everyone on the team)

Solution (team selected and the same for everyone on the team)

Why YOU Think it is the best Solution (this should be of your own writing and not as a team)

Podcast 4

Title of Episode

Date Episode Aired

Select one Empathy, User Need, Insight or Prototyping

State the element and then provide evidence from the podcast that shows you understand the meaning of that element.

Select one Empathy, User Need, Insight or Prototyping

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Select one Empathy, User Need, Insight or Prototyping

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Experimentation

Identify the User's Needs

Identify the user in detail. Make sure the insights reflect the user's needs. Insights should lead to creativity and entrepreneurship.

Who is the USER?	What is the NEED?	What is the INSIGHT?

Create a Customer Journey Map

Create your customer journey map of what you want your user to experience. Using paper, pencil, markers, or digital means draw the map and organize the information with color, type, images and grids. Include all users, stakeholders and touchpoints. Make sure to lay the map flat and have good lighting to see the work clearly and shoot with your phone. Using Word, compile the images into one document and save as a PDF. Submit the PDF with Portfolio Part 3.

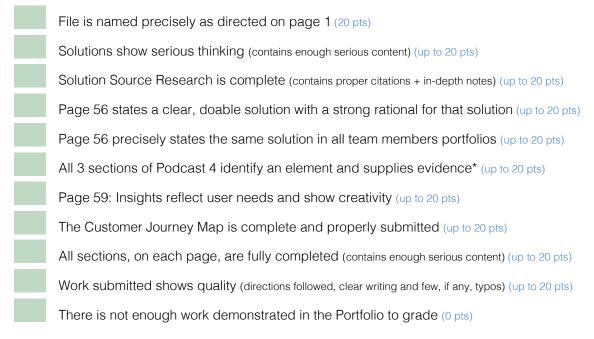
Customer Journey Map Tips

What are we trying to learn? What is the user's persona? Create user persona cards based on your challenge. How can we represent the user's persona in the map? Connect to the user making the journey. Understand what value the user is looking for. Look for all points of entry. Consider all touchpoints. Consider all user pain points. Create a path of least resistance.



Portfolio Part 3

Requirements



Total (200 pts)

Feedback

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*Podcast Evidence

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Ratioinal

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Researching the Prototype

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Complete a Minimum of 2 Sources.

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University Libraries

Type of Source

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Prototype Source 1

Citation (include web link if applicable)

Type of Source

Where Found

Credible Source and Why?

Prototype Source 2

Citation (include web link if applicable)

Type of Source

Where Found

Credible Source and Why?

Notes

If you would like to complete more than the 2 required sources use the additional individual pages.

Team: Compile the Team's Prototype Research Evaluate each team member's research and list the strongest information found related to building the prototype.

Team: Build a Prototype

Create a prototype as a team. Make sure to have good lighting in order to see the work clearly and shoot the finished prototype with a phone from all angles. Using Word, compile the images into one document and save as a PDF. Submit the PDF with Portfolio Part 4. Be prepared to bring the first prototype to class for feedback. Each team member is to submit the prototype images PDF with their Portfolio Part 4. You can do the images as a team or on your own but each team member must submit images according to the directions above.

Prototype Tips

Sketch out or storyboard the idea first. List and collect materials needed to build. Keep it cheap. What questions does this prototype need to answer? What are your biggest challenges in building it? Who are the users for this prototype? Build a rapid prototype first to work out the bugs quickly. Take detailed notes on the process. What worked? What did not? How did you fix it? Take photos as you go in order to build an archive of ideas. Elect a person to take notes and another to shoot photos. Utilize team work. Share the work.

Team: Compile Prototype Feedback

As a team, compile as much useful information you can from the prototype feedback, Use any in-class critiques and, as a team, you must seek feedback from other sources outside of the course that includes professionals, experts, users and stakeholders. DO NOT use other students outside of this course unless they fall under the criteria presented in the previous sentence.

Team: Improve the Prototype

Conduct some new research and take all the feedback received and make improvements as a team to the prototype. List below what changes were made and how it makes the prototype better.

Pitching

Team: Creating a Pitch

Pitching Tips

- 1. Start with a sincere and welcoming greeting.
- 2. Introduce the team and their respective roles. Use this as an opportunity to show the audience how your team functioned to solve the problem. A good structure and quality participation provides credibility.
- 3. Present a Tagline that will help embed the idea in the audiences mind. Use a short phrase that encompasses the social or civic value and purpose. Explain the social or civic issue your team engaged in. Make it a promise.
- 4. CLEARLY and completely state the problem. Make it a story and use evidence to prove it is the right problem. Back it up with evidence from your portfolios.
- 5. CLEARLY and completely describe in detail the solution and how it works.
- 6. CLEARLY and completely present how the idea was tested and how the testing improved it.
- 7. Present the unique value proposition. Why is this idea innovative and how is it different from what is already out there. This is where you can lose it all.
- 8. Explain the business model and how this idea is financially sustainable.
- 9. Explain how the idea is scalable. This can make or break a good investment.
- 10.Wrap-up with the key points. Remind the audience what is important.
- 11:Create a memorable call to action that fits your idea and audience. Sell, but don't over sell.
- 12:Conclude with heartfelt acknowledgments and a sincere thank you.

Use visuals that have value and do not just decorate. Use minimum text. Don't read off the slides. Use the text as reminders and for timing. Once your audience gets that you are reading off the slides their attention will go to their reading the slides before you do.

Create a pitch deck that expresses the idea. There are many templates (free and for a fee). Pick one that best expresses the idea. Think about type, layout and color for they are all powerful voices.

Use direct language and an active voice. Make it clear and concise.

Do not use notes to present the pitch. Let the pitch deck guide you. You want the audience to see that your team knows this problem and solution incredibly well.

Use 10 slides and 10 minutes. Your audience is going to hear several pitches that day. Keep it memorable, power packed with information they want to hear, be convincing, but avoid a dog and pony show. Make the tone of the pitch fit the problem/solution.

Team: Lean Canvas Directions

Divide up the sections of the Lean Canvas on page 70 (to develop a strategic business model) amongst the team. Once everyone has completed thier part, come together as a team to debate the answers and finalize the document. Each team member's page should look the same.

Problem

What problem does the team's solution solve? Insert your team's problem.

Solution

Insert the team's solution to the problem.

Key Partners

Who are the key partners? What people, businesses or organizations can support this solution?

Key Activities

What activities will this solution support, improve or make possible?

Key Resources

What are the key resources this solution needs in order to make this solution a reality? How does the team plan to get them?

Value Proposition

What value does this solution provide to customers, users or stakeholders that they did not have before? What makes this solution different from existing competitors?

Customer Relationships

How will this solution interact with potential customers and communicate its value proposition?

Channels

Which methods of communication will this solution use to spread the word about the product, business or service to the customers and key partners (users and stakeholders)?

Customer Segments

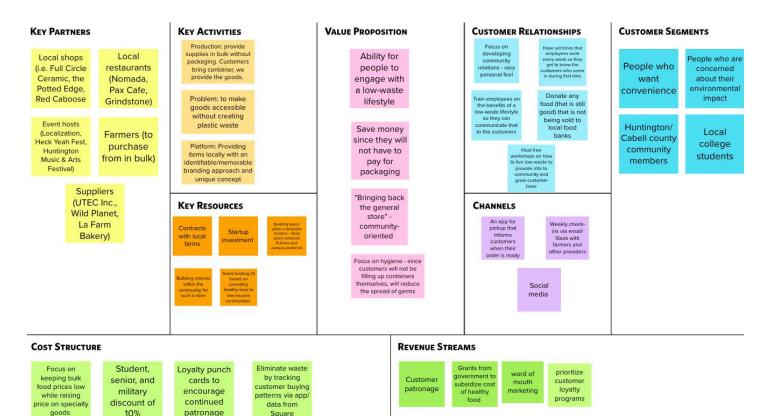
Who is this solution targeted to?

Cost Structure

Will customers pay for this solution? What will be the price structure?

Revenue Streams

How will this solution make a profit in order to support itself? Where will the revenue come from?



Adapted from Lean Canvas created by Ash Maurya (www.leanstack.com/ leancanvas) and adapted from the Business Model Canvas (www.strategyzer.com). This work is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License. To view a copy of this license, visit www. creativecommons.org/licenses/by-sa/3.0

Team: Create a Lean Canvas

Problem



Key Partners



Key Resources

Customer Releationships

Customer Segments

Revenue Streams

Solution

Key Activities

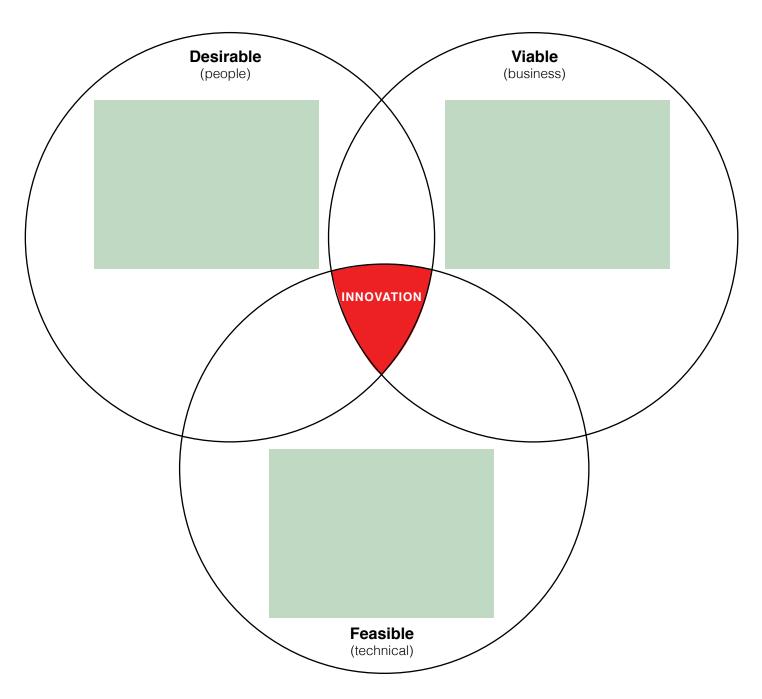
Value Proposition

Channels

Cost Structure

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Complete: Can It Happen?



Unique Value Proposition Explain what makes your team's solution innovative.

Team: Develop the Pitch

Gather together as a team and develop a pitch that will convince investors, stakeholders or officials that the team's problem is the right problem and the solution is the right solution. Back it up with evidence from this portfolio. Make notes from your discussion below. See pages 70 and 75 for guidance. Use any slide deck template the team wishes then save that file as a PDF and submit that PDF along with Portfolio Part 4. **Each team member needs to submit the Pitch PDF along with their Portfolio Part 4**.

Rubric Team: Pitch

Requirements

Greeting + team introductions + roles clearly given (up to 5 pts)
Tag line clearly explained (issue) (up to 5 pts)
Problem clearly explained and strong evidence presented (story) (up to 10 pts)
Solution clearly explained and strong evidence presented (how it works) (up to 10 pts)
Unique value proposition clearly explained (up to 10 pts)
Business model clearly explained (up to 10 pts)
How idea is scalable clearly explained (up to 10 pts)
Wrap-up with key selling points provided (up to 10 pts)
Memorable call to action given (up to 5 pts)
Sincere thank you and acknowledgments provided (up to 5 pts)
Direct language use + no notes used (up to 10 pts)
Quality of the pitch deck (expresses idea, minimum text, images of value, 10 slides/10 minutes) (up to 10 pts)

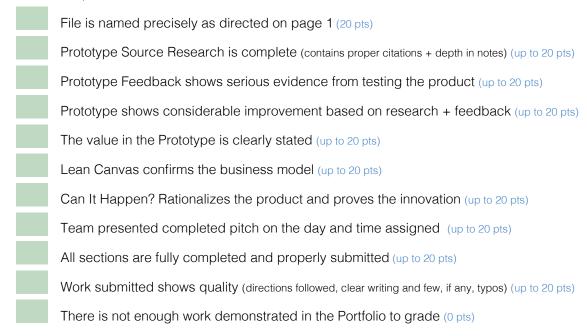
Total (100 pts)

Feedback





Requirements



Total (200 pts)

Feedback

As the course progresses and you learn from practice, expectations for the portfolio will increase.

Rational

Able to think clearly, sensibly and logical. Endowed with the capacity to reason. (New Oxford Dictionary)

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