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Registration management system for Online Learning

By

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Bachelors, Shadan College of Engineering and Technology 2019

GRADUATE CAPSTONE SEMINAR PROJECT

Submitted in partial fulfillment of the requirements

For the Degree of Master of Science,

With a Major in Computer Science



Governors State University University Park, IL 60484

2022

ABSTRACT

As there are so many changes occurring in the current education system. If we see the last 2 years, most of the student community faced a lot of issues in attending classes. To overcome all those issues, all the educational organizations transformed their current manual teaching-learning system into an online learning system. Sudden transformation to an E-Learning system is creating issues like managing the students, schedules, communication, and other information. Keeping all this in mind, we want to manage all the student and teacher data with the help of automating the current manual system.

To learn the courses online, educational institutes need to automate physical services. For doing this, a registration management system needs to be implemented. This registration system will be managing the data of students, teachers, course details, etc. For doing such operations the application will be categorizing the users into 3 types of students, teacher, and admin.

The main objective of this application is to manage the student's and teachers' data. Students who want to learn need to register with the application and then they need to sign up. This will add security to the application and the student will be identified with the help of a username and password. All the personal information of students and teachers will be maintained, they will be given additional features like adding the details, updating the data, deleting the data, searching for the data, etc. Existing applications will not suit the requirements of our system, that is the reason a new application needs to be developed. As per the requirements of the application, the estimated project completion date is 12th December 2022.

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1 Project Description

As per the requirements of the registration system for online learning, users are classified into different types. They are

- a. Teacher.
- b. Student
- c. Admin

Teacher: To become a teacher in the online learning environment, teacher should register with the application. After registering with the application, they will be getting the username and password. With these details they will be logging into the application. Every teacher will be having their own dashboard with different operations where they can perform. This module provides all the operations that will be done by the teachers in relation with the students like they can view their student data, they can post the information, they can edit their profiles, they can do the search operations etc. [1]

Student: This is another module where students will have the user interface to register with the application. After registrations they will be logging into the application by using username and password. This kind of process enables the security and prevents unauthorized access. After entering into the application, every student will be having dashboard, he will be having the right to change their details, to select the course, to communicate with the teachers etc. [4]

Administrator: He is another privileged user where he will be having the total control on the application. He will be restricting different types of users in doing the operations, he can block the user, he can be able to communicate with the user, he can delete the user, add the user etc. [3]

Apart from the above data, we can even add some static information to the application related to the students and the teachers. We can even include profit calculations and even tax information can be shown by using this application.

1.1 Competitive Information

There are different similar applications are there on the net. All these applications are built based on the general requirements of the registration management of online learning system. This application is designed

based on the requirements for an organization and it will also use as a product for the registration purpose. This application is not a competitive application and no application is competitor for it.

1.2 Relationship to Other Applications/Projects

No Relationships with any other application.

1.3 Assumptions and Dependencies

Assumptions:

- This application is used by only 3 types of users like teacher, student, and administrator.
- Information of one user is kept private to the other user.
- This is used for the registration process.
- Data, which is entered by the users, will be stored in the application database. Whenever needed, user can retrieve that data.

Dependencies:

- User should register with the application, then only he can be able to log into the application.
- Student depends on the teacher module.

1.4 Future Enhancements

Currently, we are developing the web application, in future we can implement this application as a mobile application.

1.5 Definitions and Acronyms

HTML – Hyper Text Markup Language. SQL – Structure Query Language CSS – Cascading Style Sheets.

2 Project Technical Description

To develop this application, we need different technologies for design and development of the application. In order to have the GUI, we will be using HTML, CSS3, Bootstrap etc. We can write the queries with jQuery and then want to use the core PHP for developing the application. In storing the data, we will be using MySQL database.



2.1 Application Architecture

Figure 1. Application architecture

2.2 Application Information flows

Every user is having their own dashboard. After entering the dashboard, they can see their operations. Student is one of the users who will be having the right to change his personal details, he can view the teachers, selecting the courses etc. All these details will be saved in the database.

Teacher will be posting the information, they can view their student details, they can search the information and they can edit their details. Similarly, admin will have view operations, delete operations etc.

2.3 Interactions with other Projects (if Any)

No interactions.

2.4 Interactions with other Applications

As this is an individual application, there won't be any interaction with the other applications. If possible, we can develop it as a product and integrate that in different other applications.

2.5 Capabilities

Student: [5]

Edit

Select course.

Communication.

Teacher: Register Login View Post Search Edit Admin View user. Add user. Delete user. Search Communicate user.

2.6 Risk Assessment and Management

Risk assessment is one of the tasks which is used to identify the risk. After identification of the risks, all these risks need to be evaluated. With the evaluation of risks, one will know the impact of the risks. If we know the impact of the risk, then we can take the necessary steps to manage such kind of risks. [2]

Risk assessment has been applied on our project from the initial stages. In the initial stages itself we have identified the risks; this initial identification of the risks helped us to take necessary steps in overcoming them. That is the reason we don't have much impact of the risks.

3 Project Requirements

3.1 Identification of Requirements

Following are the requirements of the application. They are

Student Requirements:

<GSU-2022_online_learning_student-Registrations-000100>

To use this application, student should register. This application is used for making registration in having the online learning. Without the registration process, application cannot be used. [6]

<GSU-2022_online_learning_student-login-000101>

To use this application, one need to enter into the application. After entering the application, every user will be getting their own operations.

<GSU-2022_online_learning_student-view-000102>

To use this application, one need to enter into the application. After entering the application, every user will be getting their own operations.

<GSU-2022_online_learning_student-search-000103>

This feature helps the user to search the information in the database.

<GSU-2022_online_learning_student-communication-000104>

Students can communicate with the teachers by using this feature.

Teacher Requirements:

<GSU-2022_online_learning_Teacher-Registrations-000100>

As a teacher user should register with the application. If the registration is done, then only he will become as a user.

<GSU-2022_online_learning_Teacher_login-000101>

To do the operations, teacher should login into the application. After logging into the application, they will be viewing all the operation that can be done by them.

<GSU-2022_online_learning_Teacher_view students-000103>

Teacher can be able to view the students registered in the courses which they are handling.

<GSU-2022_online_learning_Teacher_post-000104>

With this feature teacher will be able to post the information related to the courses.

<GSU-2022_online_learning_Teacher_edit-000105>

After registering with the application, teacher can be able to edit the information if needed.

<GSU-2022_online_learning_Teacher_search-000106>

Teacher will be searching the required information.

Admin operations:

<GSU-2022_online_learning_Admin_login-000101>

Admin will be logging into the application with the help of this feature.

<GSU-2022_online_learning_Admin_view users-000102>

Admin is having the right to view all types of users.

<GSU-2022_online_learning_Admin_Delete users-000103>

Admin will have the right to delete the users.

3.2 Operations, Administration, Maintenance and Provisioning (OAM&P)

This application is storing the data in the database by performing different operations. All this information which is stored need to be protected. If any loss has been occurred because of data breaches, data theft and because of any other miscellaneous activities then there should be some mechanism which should be able to recover the data. Organization should establish some recovery procedures.

3.3 Security and Fraud Prevention

In this project, we have implemented authentication and authorization. Authentication is implemented with the help of username and password. Authorization is implemented by giving different access rights to different users. Unauthorized access is prevented in this application. [6]

3.4 Release and Transition Plan

| No. | Project phase | Start Date | End date | Status |
|-----|------------------------|------------|------------|----------|
| 1 | Gathering requirements | 02-09-2022 | 12-09-2022 | Finished |
| 2 | SRS Document | 13-09-2022 | 25-09-2022 | Finished |
| 3 | Design | 26-09-2022 | 15-10-2022 | Finished |
| 4 | Implementation | 16-10-2022 | 10-11-2022 | Finished |
| 5 | Testing | 11-11-2022 | 18-11-2022 | Finished |
| 6 | Documentations | 19-11-2022 | 27-11-2022 | Finished |
| 7 | Presentation | 27-11-2022 | 1-12-2022 | Finished |

Table 1: Project schedule

4 Project Design Description

Database design:

Db:



Figure 2: list of database tables

Tables:

| | Table 🔺 | Actio | on | | | | | | Rows 🧕 Type | Collation | Size | Overhead |
|---|---------------------|-------|--------|-------------|----------|-------------------|---------|--------|-------------|--------------------|-----------|----------|
| ٥ | admin_tbl | Ń | Browse | K Structure | R Search | H Insert | 👷 Empty | 😂 Drop | 8 InnoD8 | utf8mb4_general_ci | 16.0 KiB | 6 |
| Ò | course_tbl | * | Browse | K Structure | 🕴 Search |]i Insert | Empty | Drop | 8 InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| 0 | post_tbl | Ŕ | Browse | M Structure | 🕴 Search | insert | 🗬 Empty | 🖨 Drop | 0 InnoDB | utf8mb4_general_ci | 16.0 KiB | |
| | student_details_tbl | À | Browse | | 🛊 Search | j é Insert | 🗑 Empty | C Drop | 8 InnoDB | utf8mb4_general_ci | 16.0 Kis | |
| ٥ | student_tbl | Ŕ | Browse | K Structure | R Search | Hinsert | 💂 Empty | 😄 Drop | 8 InnoDB | utf8mb4_general_ci | 16,0 Ki8 | |
| 0 | teacher_details_tbl | * | Browse | X Structure | 🕴 Search | }insert | ₩ Empty | C Drop | 0 InnoDB | utf8mb4_general_ci | 16.0 Ki8 | - |
| 0 | teacher_login_tbl | * | Browse | K Structure | R Search | } ∉ Insert | Empty | O Drop | 8 InnoDB | utf8mb4_general_ci | 16.0 Ki8 | |
| | 7 tables | Sum | | | | | | | 0 InnoDE | utf8mb4_general_c | 112.0 KiB | 0 B |

Figure 3: List of tables and its structures

E-r diagram:



Figure 4: Relationship Diagram

User Interfaces:

Admin Panel:

View student records:

Here we can sort the data from any column in the table. We have custom option show records in a page based up on the count of records.

View:

| € → C | 0 | localhost/Online learning// | Admin/View Students.php | | | | | | I | 1.0 | Guest | 1.14 |
|-------------|--------|-----------------------------|---------------------------|--------|--------|-----------------------|---|----------|--------|--------|-------|------|
| Online Lea | ming | g Home View Stude | nts View Teachers View Co | xirses | Logàul | | | | | | | |
| how 10 v er | ntries | | | | | | | Search: | | | | _ |
| S.NO | - | Student ID | Student Name | + | Class | Email | ŧ | Phone | Add | iress | | |
| 1 | | ASDF1223 | test student | | MS | teststudent@gmail.com | | 56789012 | test a | ddress | 8 | |

| 1 | | | | | | | () • |
|---|-------------------------|---------------------------------------|-------|---------|---------|----------|-------------------------------|
| - | , P Type here to search | • • • • • • • • • • • • • • • • • • • | # 💽 🗖 | i 🗊 💼 🚺 | 0 🛛 🖉 🧕 | 🚾 🥥 27°C | ^ © 6 12:18 PM N 10/23/2022 ₹ |

Figure 5: View student details

| ka localhost / 127.0 | 0.1 / online_lear × | Conline Lear | ning Admin View St. 🗙 | + | | | | | | × - | - 0 | × |
|----------------------|--|--------------|-------------------------|---|-----------------|-------------------|---|-------|-----------|--------|-----|---|
| ← → C © | → C (① localhost/Online_learning/Admin/View_Students.php | | | | | | | | | | | |
| Online Learnin | Illine Learning Home View Students View Teachers View Courses Logout | | | | | | | | | | | |
| show 10 × entrie | w 10 V entries Search: Isasd | | | | | | | | | | | |
| in the second second | 5 | | | | | | | Se | arch: sas | d | | |
| S.NO A | s Student ID | . \$ | Student Name | ¢ | Class φ | Email | ¢ | Phone | arch: sas | Addres | s | ¢ |
| S.NO A | s Student ID | ÷ | Student Name | ¢ | Class | Email ds found | ¢ | Se | arch: sa | Addres | s | ¢ |





View teachers:

| ← → C | localhost/Online le | Cintine Learning Admin \ arning/Admin/View Teach | View Ta: X + | | | | | × 0 | - | Guest |
|--------------|---------------------|---|---------------------------|---------------|-----|---------|-----------------|-----|---|-------|
| Online Lea | rning Home Vie | w Students View Tea | chers View Courses Logout | | | | | | | |
| 2 | | | | | | | 01 | | | |
| Show 10 v er | ntries | | | | | | Search: | | | |
| Show 10 v er | Teacher ID | ¢ 7 | eacher Name | Qualification | . 0 | Subject | Search: Experie | nce | | |

| 4 | | | | | | | | | • |
|---|----------------------------------|-----|------|---|-----|---------|-----|----------------|--------------------------|
| | ${\cal P}$. Type here to search | × 🔊 | 0 ⊒: | 0 | 💼 💼 | 1 🧿 🖪 📓 | 🧿 🚾 | 🥥 27°C 🔷 🖻 🐔 🐿 | e ⊴∉ dio) ENG 12:19 PM 🛃 |
| | | | | | | | | | |



View courses:

| Iocalhost / 127. | 0.0.1 / online_lear: 🗙 😵 Online Learning Admin | New Cc × + | | | v – ø × |
|-----------------------|--|---------------------------|---------------|------------------|-----------------|
| ← → C (| localhost/Online_learning/Admin/View_Cour | ses.php | | | Guest : |
| Online Learnin | ng Home View Students View Tea | chers View Courses Logout | | | |
| Show 10 v entrie | 55 | | | Search: | |
| S.NO Å | Teacher ID | Course Name | Starting date | Complete in days | ¢ status ¢ |
| 1 | testleacher@gmail.com | php advance programming | 2022-11-25 | 45 | 1 |
| 2 | testteacher@gmail.com | php programming | 2022-10-27 | 45 | 1 |
| Showing 1 to 2 of 2 e | entries | | | F | Previous 1 Next |



Figure 8: View course details

| ka localhost / 127. | 0.0.1 / online_lear 🗙 😵 Online Learning Admin | View Co × + | | ~ | - 0 | × | | | |
|---|--|-------------|-------------------------------|-------------------------------------|--------|---|--|--|--|
| ← → C () locathost/Online_learning/Admin/View_Courses.php | | | | | | | | | |
| Online Learnii | line Learning Home View Students View Teachers View Courses Logout | | | | | | | | |
| | w 10 v entries Search: 2022-10-27 | | | | | | | | |
| Show 10 v entrie | 25 | | | Search: 2022-10 | -27 | | | | |
| S.NO A | Teacher ID 0 | Course Name | Starting date φ | Search: 2022-10 Complete in days | status | ÷ | | | |
| Show 10 v entrie | rescher ID ∲ testteacher@gmail.com | Course Name | Starting date ¢ 2022-10-27 | Search: 2022-10 Complete in days | status | ¢ | | | |



Figure 9: View Teacher details

Teacher panel:

Add courses:

| 📸 focalhost / 127.0.0.1 / online_jes: 🗴 😵 Online Learning Admin View To: 🗴 🕂 | | | ∨ – ø × |
|--|---------|--------------------|-----------------------------|
| ← → C | | | Guest : |
| Online Learning Home Add Courses Add Posts View Posts V | | | |
| | | | |
| | | | |
| Add Courses Form | | | |
| Enter Course Name | | | |
| Course Starting Date | | | |
| mm/dd/yyyy | 0 | | |
| Course period | | | |
| Enter Course completed days | | | |
| Add Course | | | |
| | | | |
| E 🔎 Type here to search | n 🗈 🖻 🛛 | 🛛 🧿 🔛 📓 🧿 🖽 🥚 27°C | ∧ ⊕ 🐔 🗃 🖟 ₫0 🕅 10/23/2022 🕎 |

Add posts:

| 🙀 localhost / 127.0.0.1 / online_les 🛛 🗙 | Online Learning Admin View Te × + | ✓ - a × |
|--|-------------------------------------|-----------------|
| ← → C @ localhost/Online_le | arning/Teacher/Add_Posts.php | 🖬 😝 Guest 🚦 |
| | | |
| Add Posts Post Title | | |
| Enter Post Title | | |
| Post Description | | |
| | | |
| | | |
| | Add Course | |
| | 4 * A | ENG 1221 PM |

Figure 11: Add posts

View posts:

| → C ① localhost/O | nline_learning/Teacher/View_Posts. Add Courses Add Posts | Php Mew Posts View Courses | s View Desaits logout | | Guest |
|--|---|--------------------------------|--|--------------------|---|
| | | | | | |
| All Posts | ntries | | | Search | |
| All Posts show 10 v e | ntries Teacher ID | Post Title | Description | Search Status 0 | Actions |
| All Posts show 10 ~ e | ntries Teacher ID testleacher@gmail.com | Post Title php programming | Description 0 events are going please attend | Search Status 0 | Actions 0 |
| All Posts show 10 - e | ntries Teacher ID testteacher@gmail.com | Post Title php programming | Description events are going please attend | Search Status 0 | Cations |
| All Posts Show 10 • • S.NO * Showing 1 to 1 d | ntries Teacher ID Iestleacher@gmail.com | Post Title php programming | Description events are going please attend | Search Status 1 | Actions () Ear Dekte |
| All Posts show 10 • • S.NO A 1 Showing 1 to 1 of | ntries Teacher ID Iestleacher@gmail.com | Post Title php programming | Description 0 events are going please attend | Search | Actions () East Detete Previous 1 Next |

Figure 12: View all posts

Edit particular post:

| 🚵 localhost / 127.0.0.1 / online_less 🗙 🚱 Online Learning V | ew Posts × + | ν – σ × |
|--|---|---|
| ← → C ② localhost/Online_learning/Teacher/View | Posts.php | Guest ; |
| Online Learning Home Add Courses Add P | View Posts - View Counties - View Desaits - Instant | |
| | Edit Post Details | |
| | Post Title | |
| | php programming | |
| | Post description | |
| | events are going please attend | A |
| All Posts | | |
| Show 10 - entries | | Search: |
| S.NO * Teacher ID | Cables | us (Actions) |
| 1 testieacher @gmait.com | Active 🗸 | cat |
| | Edit data | Credeter |
| Showing 1 to 1 of 1 entries | | Previous 1. Next |
| | Close Save changes | |
| | | |
| and the second | | |
| P Type here to search | o 🗷 💽 🛅 💼 💼 🚺 🧕 💆 🖉 📟 | O 27"C ∧ O 40 ENG 12:22 PM IN 10/23/2022 |

Figure 14: Edit post details

Delete particular post:

| Rocalhost / 127,0.0.1 / online_lea | × Ø Online Learning View Posts | × + | | | ν – σ x |
|------------------------------------|---------------------------------------|---|--------------------------------|-------------|-----------------|
| ← → C (① localhost/0 | nline_Jearning/Teacher/View_Posts.php | p | | | Guest 1 |
| Online Learning Home | Aar Courses Aar prive | New Posts | View Dethils - Midnet | - <u>-</u> | |
| | Are you This action | sure you want to delete these on cannot be undone. | Records? Cancel De | | |
| All POSts show 10 - • | ntries | | | Search: | |
| S.NO * | Teacher ID 8 | Post Title | Description | Status Ad | tions |
| 1 | testteacher@gmail.com | php programming | events are going please attend | 1 | Edit |
| | | | | | Delete |
| Showing 1 to 1 o | f 1 entries | | | | Previous 1 Next |
| | | | | | |
| | | | | | |

Figure 15: Delete particular post

View courses:

| C () localhost/ | Online_Jearning/Teacher/View_C | ourses.php | | | | 🛛 \varTheta Guest |
|--|---|---|--|--------------------------|-------------------|--|
| | | ts View Posts View Courses | View Details | | | |
| | | | | - | 1 | |
| | | | | | | TID III |
| | | | | | | 71 |
| All Cours | ies entries | | | | Search: | |
| All Cours show 10 V | entries | Course name | Start date | Completion in days | Search: | Actions 0 |
| All Cours show 10 v | eeS entries Teacher ID testleacher@gmail.com | Course name of php advance programming | Start date 2022-11-25 | Completion in days | Search: Status | Actions Contract Cont |
| All Cours show 10 | ees entries Teacher ID testleacher@gmail.com | Course name php advance programming | Start date 2022-11-25 | Completion in days | Search: Status | Actions |
| All Cours show 10 v | ECS entries Teacher ID testteacher@gmail.com | Course name php advance programming php programming | Start date 2022-11-25 2022-10-27 | Completion in days 45 45 | Search: Status | Actions 0 Edit Device |
| All Cours show 10 ~ s.No 4 1 2 | eCS entries Teacher ID testleacher@gmail.com | Course name php advance programming php programming | Start date 2022-11-25 2022-10-27 | Completion in days 45 45 | Search: | Actions 0 Eat |

Figure 16: View courses

| localhost / 127.0.0.1 / onlin | ne_lea 🗙 😨 Online Learning V | View Posts × + | | | | v - 0 X |
|---|----------------------------------|---|----------------------|------------|------------|--------------------------------------|
| \leftrightarrow \rightarrow C \odot localho | st/Online_Jearning/Teacher/View | v_Courses.php | | | | 🛛 🕒 Guest 🕴 |
| Online Learning III | one Add Courses Add | Edit Post Details | Connees Weerplatting | and a | | |
| | | Course Name php advance programmin Starting date 11/25/2022 Complete course in days | g | | | |
| All Cou show 10 s.No | IFSES entries * Teacher ID | 45 Status Active | | | Search: | Actions |
| 1 | testeacher@gmail.com | | Edit data | Close Save | t changes | Edit Delete |
| 2 | testteacher@gmail.com | hiết troền munit | 2022-10-23 | | 1 | cair ctivate [®] ₩i%dows |
| Showing 1 t | to 2 of 2 entries | | | | | Previous 1 Next |
| E P Type here to se | earch 🔧 🌧 | o 🗄 💽 🚍 | I 🗊 💼 🌒 (| 9 🖬 🖻 🛛 | 🧿 🚾 🥚 27°C | ^ © 💁 📾 🔬 d≬ 🔤 № 12/23 PM 🛃 |

Figure 17: Edit courses

Delete course:

| C O localhost | Online_Jearning/Teacher/View_C | Courses php | New Orlder | | 1 | 🛛 \varTheta Guest |
|--|---|--|--|-----------------------|---------|----------------------------|
| | | Delete Post details Are you sure you want to delete these This action cannot be undone. | Records? | Cancel Delete | | 'nŒœ |
| Contraction of the local division of the loc | and the second strategy is a second strategy of the | A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O | | | | |
| All Cour | Ses entries | Thur 11 | | | Search: | |
| All Cour show 10 - s.NO - | SES entries Teacher ID Iestleacher@gmail.com | Course name | Start date 0 | Completion in days | Search: | Actions |
| All Cour show 10 - s.NO - 3 | SeS entries Teacher ID Teatleacher@gmail.com | Course name | Start date 4 2022-11-25 | Completion in days | Search: | Actions |
| All Cour show 19 - s.NO - 1 2 | SeS entries Teacher ID Testleacher@gmail.com | Course name php advance programming php programming | Start date (2022-11-25 2022-10-27 | Completion in days 45 | Search: | Actions 1 Edd Delete |
| All Cour show 10 - s.NO * 1 | Ses entries Teacher ID Testleacher@gmail.com | Course name php advance programming php programming php programming | Start date 2022-11-25 2022-10-27 | Completion in days 45 | Search: | Actions |

Figure 18: Delete courses

View details:

| localhost / 127.0.0.1 / online_lear X | Coline Learning Vi | iew Posts X + | | | | | v - 0 |
|--|--|-----------------------|---|--------|----------------|----------------------------------|-----------|
| C 🔘 localhost/Onlin | e_learning/Teacher/View | _Details.php | | | | | Guest |
| Online Learning Home | Add Courses Add F | Posts View Posts V | view Courses View Details | logout | | | |
| | | | | | | nnsinder nämer dinim te di | |
| | | | | | - | 1 | |
| | | | | | | | E I |
| | | | | | | | |
| | | | | | | | 101 |
| | | | | LAL | | | |
| | | | and the second se | | | | |
| View details | | | | | | | |
| View details | es | | | | | Search: | |
| View details | es ID | Name | Qualification | | Subject | Search: | |
| View details snow 10 v entr | A ID aver123 | Name test leacher | © Qualification | å | Subject | Search: Experiences | 0 |
| View details snow 10 - entr | ID qwer123 | Name test teacher | © Qualification | 6 | Subject | Search: Experiences | 0 |
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5 Internal/external Interface Impacts and Specification

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By using this application, online learning process registration becomes very easy. Students can register from wherever they are there. Even teachers can view all the student's information who has joined in their courses. So much of time and effort will be saved with this application. People who will be using this application need not require any kind of training, they can directly use this application with minimum computer knowledge.

6 Design Units Impacts

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Design is one of the important parts of the project development. Implementing the application without the design may leads to ambiguity. Sometimes people will not understand some points with the requirements. With the design, people will get clarity on the requirements. We will be knowing the flow of information in the application with the help of design. To represent the requirements, one can use different types of design tools like UML diagrams, UI design, system architecture, data flow diagrams etc.

6.1 Functional Area A/Design Unit A

6.1.1 Functional Overview

Functionalities of the application are identified based on the users. In this application there are 3 different types of users are there. They are:

Teacher: To know the information about the student by the teachers is very difficult. With this application, student information as per the course will be gathered immediately. Teachers can communicate with the students; registration process will be automated, and online operations will be done with the help of this application.

Student: with the physical registration process, it became very difficult to the students to register with any of the course. This application gives you such facility and establishes the communication. From any corner in the globe, student can register to any of the course for online learning. Similarly, admin will have some of the rights, he will be having additional privileges like delete operation etc.

Administrator: He is another privileged user where he will be having the total control on the application. He will be restricting different types of users in doing the operations, he can block the user, he can be able to communicate with the user, he can delete the user, add the user etc.

6.1.2 Impacts

Doing the operations physically is very difficult to the student and teacher. There will not be any kind of face-to-face interaction and through the application every kind of interaction will be done. Student and teacher operations are automated and their paper work is reduced.

6.1.3 Requirements

Requirements of the application was clearly dealt in the previous section. Every requirement is having a requirement id, and the functionality that is going to be implemented. This kind of numbering the requirements helps the people to design, to know the flow, to code etc.

7 Open Issues

As the application is developed as per the requirements and the requirement analysis was done. With such kind of process, we won't get any issues. While implementing we got some technical issues like database connection, implementation of some concepts, but we have tried our level best to resolve those issues.

8 Acknowledgements

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9 References

[1]. Anderson, T. (2004). Towards a theory of online learning. *Theory and practice of online learning*, *2*, 109-119.

[2]. Ayyildiz, E., & Taskin Gumus, A. (2021). A novel distance learning ergonomics checklist and risk evaluation methodology: A case of Covid-19 pandemic. Human Factors and Ergonomics in Manufacturing & Service Industries, 31(4), 397-411.

[3]. Curtis, D. D., & Lawson, M. J. (2001). Exploring collaborative online learning. *Journal of Asynchronous learning networks*, 5(1), 21-34.

[4]. Keengwe, J., & Kidd, T. T. (2010). Towards best practices in online learning and teaching in higher education. *MERLOT Journal of Online Learning and Teaching*, 6(2), 533-541.

[5]. Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and higher education*, *14*(2), 129-135.

[6]. Smart, K. L., & Cappel, J. J. (2006). Students' perceptions of online learning: A comparative study. *Journal of Information Technology Education: Research*, *5*(1), 201-219.