

April 6th, 2021
Dr. Craig Scratchley
8888 University Drive
Simon Fraser University, School of Engineering Science
Burnaby, British Columbia, V5A 1S6

RE: Tenshi Baby Crib Proposal - ENSC 405W/440

Dear, Dr. Scratchley,

We are Tenshi Company and we propose to you our product: the Tenshi Baby Crib. Enclosed in this letter is the project proposal for our product which outlines its capabilities, market value, and our allocated company resources. In reading our proposal, we hope that you consider investing in our product.

The Tenshi Baby Crib is a high-tech crib system to replace current baby monitors. Our crib monitors a baby's environment and sleeping position and can quickly notify parents when their baby may be unsafe so they can take action as soon as possible. Not only that, the sensor technology is seamlessly integrated into the crib such that parents just have to place their baby in the crib to start monitoring. Paired with a mobile application, parents can analyze their baby's environment and sleeping health at just arms reach. In all, our crib can reduce the occurrence of Sudden Infant Death Syndrome and facilitate healthy growth for newborn children.

Our team consists of computer engineering students experienced in electronics, programming, and Internet of Things systems. With our experience, we strive to deliver a high quality product that our customers can rely on.

From all of us at Tenshi, we would like to extend a thanks to you, Dr. Scratchley, and the instructional team for your time and consideration. We hope that the enclosed proposal assures you that our product is the newest and improved solution to baby monitoring. For any questions, you can contact us by email at tenshi-company@sfu.ca.

All the best,

A handwritten signature in black ink, appearing to read 'Alvin David', written over a light blue circular stamp.

Chief Executive Officer, Alvin David
Tenshi Company
tenshi-company@sfu.ca

Enclosed: Tenshi Baby Crib Proposal



BABY CRIB SYSTEM PROPOSAL DOCUMENT

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Submitted to

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Tenshi Baby Crib by Tenshi Company

Executive Summary

Like a guardian angel that keeps you safe, the Tenshi Baby Crib flawlessly monitors newborn children under its watch. Developed by us at Tenshi Company, we have designed *the* modern solution to traditional baby monitors, so as to live up to the Japanese word for angel: “Tenshi.”

The current problem with traditional baby monitors is that they add another layer to already busy parenting routines and only provide simple audio or video monitoring. Some products have attempted to improve upon baby monitoring in the form of wearable technology or smart cameras, but even these add another layer of activities for the parent to undertake. That is why us at Tenshi Company have devised a baby monitoring solution that accommodates many types of parenting styles and eliminates the need for intrusive wearables or video cameras.

The Tenshi Baby Crib is an all-in-one environmental and body position baby monitor system integrated into an already essential crib. This crib accurately and frequently measures the room temperature, the noise level, and the baby’s lying position. This is achieved through electronic sensors meticulously placed around the crib and with a pressure mat for the baby to lie on. Paired with a mobile device, caretakers and parents can visualize these metrics to ensure their infant grows in a healthy manner. The crib has the ability to send notifications to the mobile device when the room gets too hot or cold, when the baby starts to cry, and if the baby changes their lying position. This method of monitoring can be seamlessly integrated into various parenting routines, since all it takes to start monitoring with our crib is to place them on the crib mattress, and check the paired mobile phone when needed.

Our team at Tenshi Company consists of a highly experienced team of computer engineering students who will produce an engineering prototype by August 2021. This non-intrusive yet innovative solution to baby monitoring is a challenge we can overcome. In the end, our goal is to provide parents and caretakers a baby monitoring solution that they can rely on over all our competitors, just like a guardian angel. We believe that the Tenshi Baby Crib accomplishes just that.

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Glossary

Table I: Glossary

Term	Definition
Engineering Science Student Endowment Fund (ESSEF)	Funding for capstone projects offered by Simon Fraser University's Engineering Science Student Society.
Engineering Science Student Society (ESSS)	A Simon Fraser University Departmental Student Union.
Sudden Infant Death Syndrome (SIDS)	An unexplained death of a healthy newborn baby, which is normally associated with sleep.
Sudden Unexpected Infant Death (SUID)	A general death of infants under the age of 1.
Temperate Climate	Climates of Earth that occur in middle latitudes, between tropical and polar regions.

1. Introduction

1.1 Background

Infants are exposed to harmful environmental factors, making them susceptible to overheating, suffocation, and even hearing loss. However, ensuring proper sleep position lowers the risk of Sudden Infant Death Syndrome (SIDS) [1]. An infant is in its most vulnerable and helpless time of their life, requiring essential care and proper attention. Specifically, when a baby cries, attending and soothing them develops the initial relational responses that build the foundation of their behaviour as the child grows up [2]. As a result, parents or caretakers bear the responsibility to constantly monitor an infant to ensure their safety. However, taking care of infants is no easy feat on top of other responsibilities. This introduces the proposition of our Tenshi Baby Crib, a smart baby monitoring crib to help alleviate the stress and difficulties of supervising a baby.

1.2 Tenshi Baby Crib

The Tenshi Baby Crib keeps babies safe by helping parents and caretakers monitor both the environment and position of the baby. The crib has combined several key features that allow a reliable yet convenient way to monitor the baby. The crib is composed of two main systems, the sensor and the data analysis system. Designed to be as hands-off as possible, the crib is integrated with the sensor systems, composed of a sound detector, temperature monitor, and a pressure mat which provides data for position detection. The crib connects to the data analysis system, which communicates with an intuitive mobile application. This provides a straightforward method to check the status of the real-time readings of the ambient room temperature, sound levels, and baby position. If any vulnerabilities are determined within these three factors, a notification will be sent to parents or caretakers to prevent any dangerous situations.

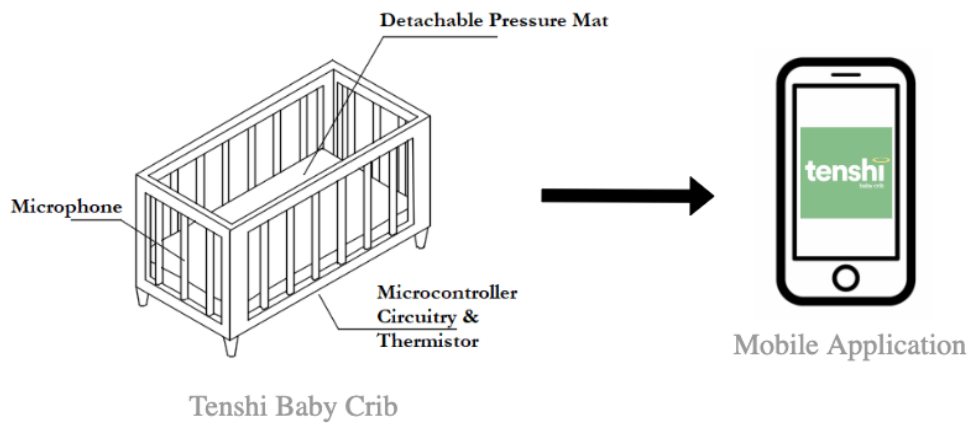


Figure 1.1: Tenshi Baby Crib System

1.3 Proposal

The Tenshi Baby Crib provides a unique all-in-one solution to baby monitoring, focused on delivering smart technology through a non-intrusive method. The baby is monitored through inconspicuous sensors integrated into the crib, preserving the sanctity and comfort of the room with no technology within view. As the system is hands-off, users only have to pay attention to critical notifications of vulnerabilities through the mobile application. We ensure that there is minimal user reliance within the set up as well. Hence, the following document will provide a high level overview of the plans and details of the product. First, the project scope will be explored, introducing the product's capabilities, benefits, and risks. Following that will be a market analysis, outlining market need and competition. Lastly, the plans of the project will be discussed, delving into project budget and schedule, along with descriptions of the team members supporting Tenshi Company.

2. Project Scope

2.1 Product Capabilities

The goal of the Tenshi Baby Crib is to educate parents and caretakers on habits to reduce the risks associated with SIDS through frequent and accurate measurements. The Tenshi Baby Crib allows users to control and monitor their baby and the environment by tracking the room temperature, detecting sound of the baby crying and watching their sleeping position. For ease of use, these monitoring features are automatically performed whilst the baby is in the crib. When paired with a mobile device, caretakers can analyze the measurements taken by the crib and be notified as quickly as possible. All in all, the Tenshi Baby Crib's delivered features creates a modern, non-invasive, baby monitoring solution that allows parents and caretakers to make safety decisions and intervene if the baby is deemed vulnerable. Similar to newer crib and baby monitor designs, the information and notifications will be promptly accessible on the user's mobile device. The Tenshi crib is designed to gather data from the baby in the least intrusive manner. This is achieved by a mobile application user interface that is meticulously designed to be intuitive and practical, as seen in Figure 2.1.

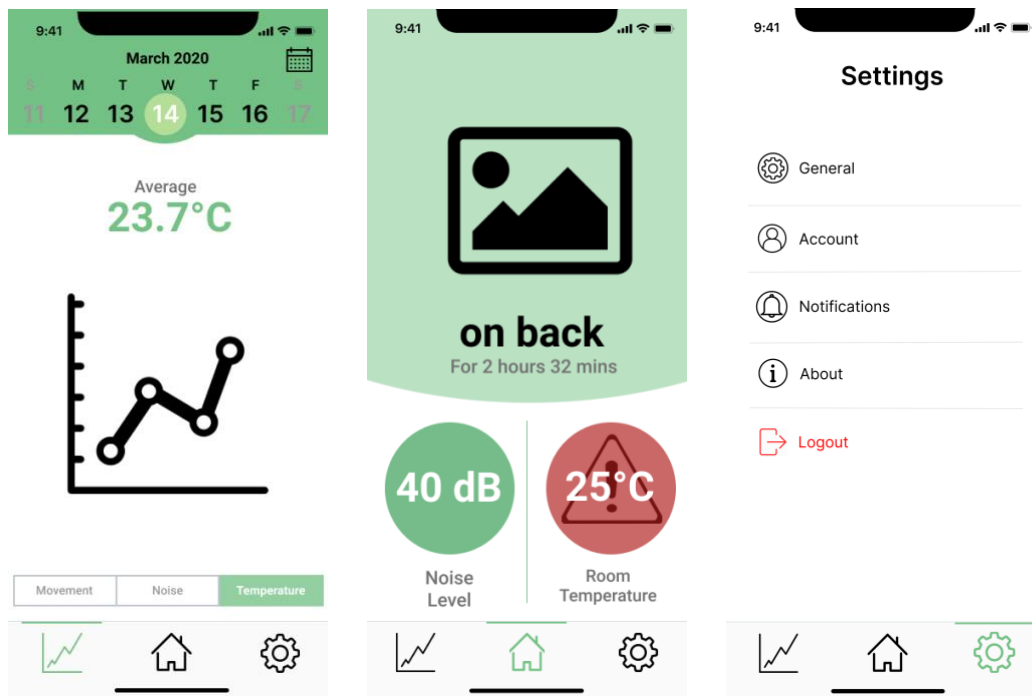


Figure 2.1: Data, Home, and Settings Menus.

To add on to its reliability, the Tenshi Baby Crib adheres to Health Canada’s standards on baby cribs, ensuring safety. In regards to utilizing the crib, Health Canada suggests that infants use cribs up until they grow to 90cm [3]. However, children may find it difficult to make the switch up until three years old [4]. As such, the Tenshi Baby Crib will be tested for longevity and durability, guaranteeing to last up to three years. The majority of the electronics placed throughout the crib will be inaccessible to the child so as to minimize the potential of hazardous and dangerous situations from occurring . Beyond three years, it will be advised to avoid reusing the crib monitoring system as the pressure grid and electronics are subject to wear, reducing reliability. Nonetheless, to promote environmental and economical sustainability, the Tenshi Baby Crib itself can be used as a standard Health Canada approved crib past the three year threshold.

2.2 Product Benefits

In addition to providing parents a means of facilitating healthy growth for their child, the Tenshi Baby Crib has been designed to accommodate multiple parenting styles.

Active and Passive Monitoring

Undergoing user interviews, we found that traditional baby monitors required active attention in order to routinely check up on the baby. With our product, caretakers now have the option to passively listen for notifications through their mobile advice, allowing them to take care of other tasks in the meantime. Moreover, the mobile application can display previously gathered data and information once caretakers are available to actively attend to their baby. Overall, the mobile app supports both passive and active monitoring whilst away from the crib with accurate and real time data.

Negligible Impact to Routine

Once the crib is turned on and the baby placed on the mattress, the crib automatically starts to monitor the environment and the baby’s sleeping position. Unlike traditional baby monitors, there is no need to ensure that the monitor is placed correctly, or in the case of wearable tech, put it on the baby. Placing the baby in their crib is all that caretakers need to do. To supplement this, the modern age has made phones an integral part of society and is already on oneself more often than not. In combination of these two factors, being able to utilize a baby monitor has never been easier.

Reliable and Customizable Notifications

The Tenshi Baby Crib notifies caretakers through use of internet connection. However, internet connection is not always stable and thus information gets lost as a result. To circumvent this, the Tenshi Baby Crib will continuously monitor and attempt to send notifications to a caretaker's mobile device in timely intervals until it confirms that the notification has been received through an active internet connection. Consequently, the mobile application will inform users whether connection to the crib has been lost. Even more, notifications will be sent again if the baby is still in a vulnerable situation. These notifications are customizable in terms of its frequency and thresholds, just like any other mobile application. Shown in Figure 2.2 is the current view of changing notification settings for temperature. Overall, caretakers can be confident that the notifications that they want will be received.

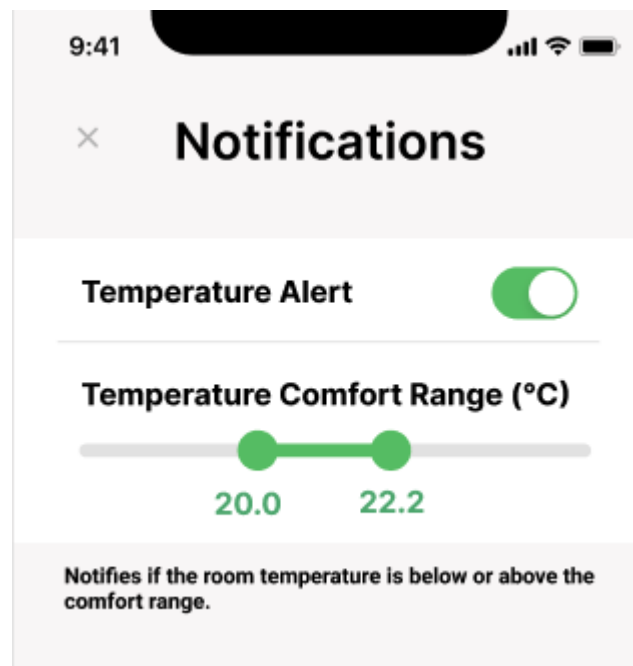


Figure 2.2: Temperature Notification Settings

2.3 Product Risks

The Tenshi Baby Crib adheres to multiple international engineering standards in addition to crib standards set out by Health Canada to ensure product safety. Utilizing the crib as intended will minimize health risks to both the baby and users. As such, the following risks pertain more to its malfunction under extreme conditions and use overtime.

Physical Damage of the Crib

Like any other technological device, the Tenshi Baby Crib's functionalities are subject to physical abuse. If the internal wiring of the electronics and sensors are tampered with, it may be rendered unusable. This is in addition to the fact that the pressure mat that the baby lays on is detachable to allow for cleaning. To mitigate malfunction due to mechanical abuse, all wiring—excluding the connector to the pressure mat—and electronics are abstracted away and inaccessible to the user.

Crib Usage in Non-Temperate Climates

Temperature ranges for healthy baby growth were chosen as a result of recommendations from mainly North American organizations, and thus, in temperate climates. It is known, however, that ambient room temperatures may vary due to climate and household temperature control systems. As such, we have enabled users to choose the temperature threshold that they will be notified with to accommodate for various situations. In addition, if the crib is stored and used under different climates, this may reduce the lifetime of the electronic sensors. Given that our target market is in North America, these are seldom cases and the crib is guaranteed to last three years under normal household temperatures of 16°C to 23°C [5].

Reusing the Crib System

Mentioned previously, the crib monitoring system is guaranteed to last 3 years under normal conditions. However the sensors do reduce in effectiveness overtime and will affect measurements. Thus it will be advised against to use it past the guaranteed timeline. We will inform caretakers of this risk through both the instruction manual provided with the crib and the mobile application. Nonetheless, we will highly encourage anyone with more than one child to reuse the crib without the monitoring system to facilitate environmental and economical sustainability, provided that the crib is less than ten years old and is physically undamaged [3].

3. Market Analysis

3.1 Market

Baby monitors and cribs allow parents and caretakers to supervise and control the baby's environment according to safety recommendations. Canadian regulated cribs are meant to reduce the general risk of Sudden Unexpected Infant Death (SUID) and sleep-related incidents specifically [6]. Baby monitors help parents adapt to the new responsibilities of caring for a child with the ability to supervise their child from afar.

The current baby crib and monitor market is primarily composed of first time parents who are dealing with anxiety of caring for the infant [7]. There are multiple factors that contribute to the group of marginal consumers; such as cultural practices that promote breastfeeding and bed sharing, financial capability, and available child care options [6].

Canada reports that there has been a notable change in working patterns of families, including an increase in working mothers [8]. There has been an emphasis and promotion of Canadian companies that value being family friendly as well. These companies have a variety of Human Resources policies that include maternity leave and flexible work arrangements; all aspects that encourage mothers to balance work and family life [9].

3.2 Competitors

The current generation of new parents are equipped with a minimum technological background as mobile phone functionalities and smart technology is used on a day-to-day basis to save time, make informed decisions, and help with communication [10]. As a result, the products currently marketed need cater to a variety of lifestyles and parenting styles.

Traditional baby monitors are often handheld and allow functionalities of audio and/or video transmission. The simple handheld option normally caters to the small subset of consumers that are not inclined to download apps or set up any network configurations [11]. Upon interviewing parents and caretakers, traditional baby monitors do not adequately reassure the parent to leave their baby under its supervision, therefore, requiring them to continue to actively watch.

As a result of an increase in working mothers and advancements in technology, there has been an increase in smart baby monitors. These monitors often allow parents to receive transmissions and notification via a mobile application. This type of baby monitor often does more than simply relay the current visual and auditory observations of the baby. Newer baby monitor functionalities include monitoring the baby's vitals such as their oxygen level/intake, temperature and heart rate on top of video and audio monitoring [12].

Competitive market products to the Tenshi system include non-wearable smart baby monitors, specifically monitors that utilize movement data alongside the aforementioned vitals. These systems are often wireless network monitors. Most monitors simply notify parents of any movement in the crib via a camera. This functionality is made possible by passive infrared, common in security cameras, or computer vision [12]. However, as a result of utilizing these technologies with an HD camera equipped with night vision or heat-mapping, the selling price of these products is high. An alternative approach to movement detection is to utilize sensor mats.

Products utilizing a mattress mat sensor to gather movement data in particular have been critiqued to not be intuitive or outdated in design as many use handheld receivers [12]. In particular, set-up and configuring the system was reviewed to be difficult. In another competitor system, the alarm and notification system was not loud or alarming enough, while another was too loud. Customers who have used both systems were dissatisfied due to the number of false alarms as the sensor sensed too many ambient noises or were it off by fans or AC in use [13]. Lastly, products with a motion detection mat are often marketed to extend battery life and usage, but users have reported that external receivers need to be charged often, leading to assumptions that the design was not done well [12].

3.3 Needs

Despite AI smart technology causing a spike in the market with promises of more security and safety, parents are still not at ease or using the devices to their full capacity [13]. Alongside needing a reliable and adaptable system, parents are needing an easy-to-use and adaptable device to fit into their daily routine. Furthermore, the system must be adjustable in sensitivity and notifications should be customizable to account for the different environments and lifestyles of the parents. Most importantly, the baby monitor should not become a replacement for the parent and solely be used to provide care for the baby.

New parents are not able to feel at ease as current products provide an excess of passive data that lead to obsessive and paranoid checking of the monitor. In some cases, it can be seen that the parent begins to associate the baby with the monitor and checks the monitor more frantically than the child [8]. Parents should still be given the opportunity to learn how to parent and to grow healthy control boundaries with their child.

With these needs in mind, the Tenshi Baby Crib solution is created to help parents to maintain healthy habits and implement preventative safety habits for their baby in a way that is not intrusive or harmful. The crib system was designed to be easy to use and efficiently fit into many parenting routines. Tenshi is able to make informed design decisions to blend the necessary functionalities of traditional and modern baby monitoring systems to provide a useful and actively informative parenting solution.

4. Project Budget

4.1 Project Costs

Table 4.1: Estimated Prototype Project Costs

Type	Component	QTY	Unit Price (CAD)	Subtotal (CAD)
Electrical	Temperature Sensor	2	5.60	11.20
	Potentiometer	1	4.50	4.50
	Condenser Mic	1	4.00	4.00
	IC Audio Power Amp	2	3.00	6.00
	MUX Breakout Board	10	10.00	100.00
	Velostat Conductive Sheet	6	20.61	123.66
	Copper Tape	3	17.00	51.00
	ESP32 Microcontroller	2	23.00	46.00
	Power Source	1	10.00	10.00
	Soldering Equipment			23.06
	General Circuitry (Wires, Resistors, Breadboard, Capacitors)			55.00
Structural	Crib	1	200.00	200.00
	Mattress	1	150.00	150.00
	Integration Assembly (nails, glue)			10.00
	Pressure Mat Covering Materials			30.00
Testing	Realistic Baby Doll (1.4 kg)	1	68.80	68.80
	Glass Beads (3.6 kg)	1	40.90	40.90
	Indoor Room Thermometer	1	20.00	20.00
	Sound Pressure Level Meter	1	25.00	25.00
Contingency (20%)				\$195.88
Total with contingency				\$1175.00

The project cost, as shown previously in Table 4.1, estimates the total price of the project for the prototype phase. The costs are divided into three main sections consisting of electrical, structural, and testing components. For electrical components, these items are used to create the sensor system of the Tenshi Baby Crib, including the pressure mat, temperature and noise monitor. Structural components cover costs for the physical crib that will be presented to users as well as physical system integration costs. Testing components are used for testing the different systems to ensure accuracy and robustness in order to meet system requirements.

4.2 Project Funding

Funding will be provided by potential funding sources such as the Engineering Science Student Endowment Fund and the Wighton Engineering Development Fund. Applications will be prepared for these funding sources and any remainder uncovered costs may be provided by Tenshi Company team members.

Engineering Science Student Endowment Fund (ESSEF)

The Engineering Science Student Endowment Fund (ESSEF) is offered by Simon Fraser University’s Engineering Science Student Society (ESSS). ESSEF is aimed to be the major funding source for Tenshi Baby Crib. As ESSEF is divided into different categories, our application for ESSEF will be submitted in April 2021 for category C which is specified for class projects. Following the application form, a detailed presentation will be prepared outlining project costs along with system and component details [14].

Wighton Engineering Development Fund

The Wighton Engineering Development Fund is led by Dr. Andrew Rawicz, and will ideally be our minor source of funding. As projects that benefit society are preferred for this fund, the Tenshi Baby Crib falls under this category as it aims to help parents and caretakers along with their baby [15]. A funding proposal will be prepared, outlining the project scope along with the budget and other details.

Internal Funding

The last resort of funding will be internal funding, supported by Tenshi Company team members. Each member has agreed to equally split any remaining costs that were not covered by other funding sources. Specifically, up to \$100 CAD has been agreed upon to contribute to project costs, totalling to \$500 CAD with the five members.

5. Project Schedule

5.1 Milestones

The major processes of the project schedule involve design, integration, and testing for each major feature of the product. Completing these processes will achieve various milestones throughout the project timeline. Our list of project milestones are detailed in Table 5.1.

Table 5.1: Project Milestones

Date	Milestone	Description
Feb 4, 2021	Progress Review I	Presenting the Tenshi Baby Crib project to the instructional team for feedback.
Feb 21, 2021	Requirements Specification	Requirement elicitation complete and requirements specification outlined.
Mar 5, 2021	Development Starts	Implementation details have been researched and development begins.
Mar 11, 2021	Progress Review II	Presenting the Tenshi Baby Crib project with a demo to the instructional team for feedback.
Mar 21, 2021	UI Early Prototype	Mobile application user interface drafted.
Mar 26, 2021	Sensor & Data Analysis System Early Prototype	Sensor and Data Analysis systems developed and ready for integration and testing.
Mar 26, 2021	Design Specification	Design implementation specified for all major components of the product.
Apr 6, 2021	Project Proposal	Proposal delivered to instructional team.
Apr 16, 2021	Early System Prototype	Crib's functions and systems are developed.
Apr 23, 2021	PoC Prototype	Acceptance and PoC System Tests performed and approved.
May 3, 2021	Crib Prototype Built	Integration of the PoC Prototype with the crib.
May 31, 2021	Baby Position Identification	Pressure grid can accurately detect sleeping positions of various baby body types.
June 22, 2021	Front End UI Built	Mobile application user interface elements programmed.
July 14, 2021	Mobile Application Prototype Built	Front end UI and back-end database implemented.
Aug 2, 2021	Product Prototype	Prototype System Tests performed and approved.

5.2 Alpha Phase Schedule

The Alpha Phase of product development consists of research and early prototyping. Our focus in this phase is to develop the crib’s ability to detect vulnerabilities in the baby’s environment and sleeping position. Once the early prototype has been built, the product will be tested to ensure that it meets time and accuracy requirement specifications.

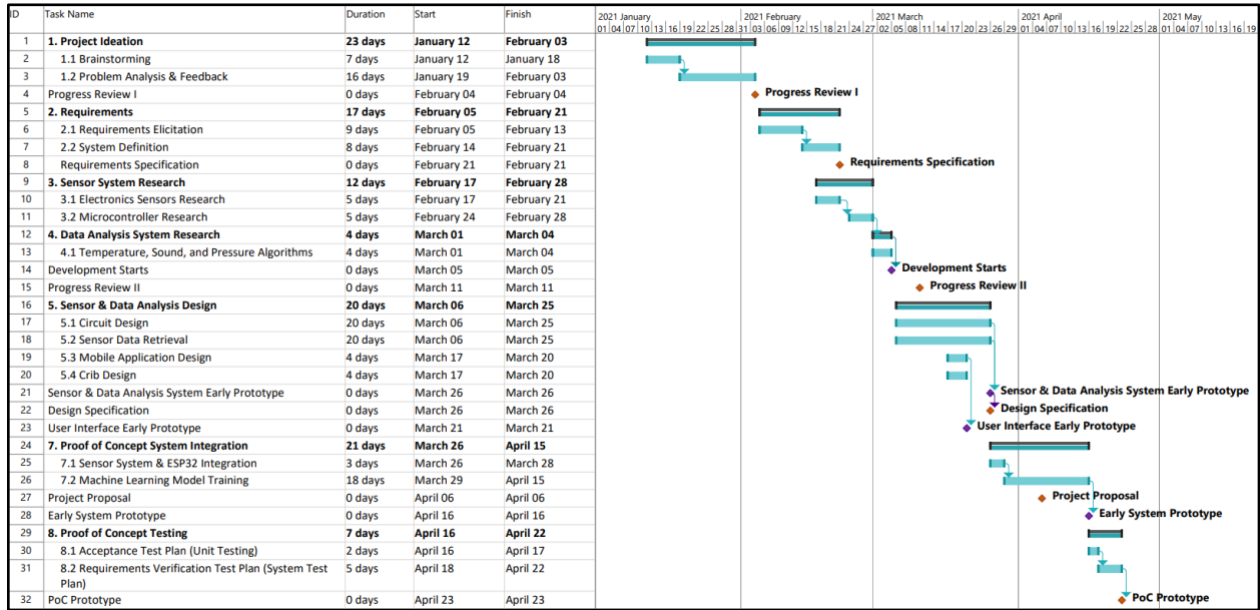


Figure 5.1: Alpha Phase Schedule

5.3 Beta Phase Schedule

The Beta Phase of product development continues from the proof of concept prototype by integrating the sensors and processing unit into the crib. To ensure functionality is maintained, regression tests will be performed. Once system features are verified, the majority of development time will go into optimizing for position identification accuracy and mobile application development. When completed, system testing and customer usability testing will be performed in order to further optimize all product features. Successful completion of prototype testing will result in a working product prototype.

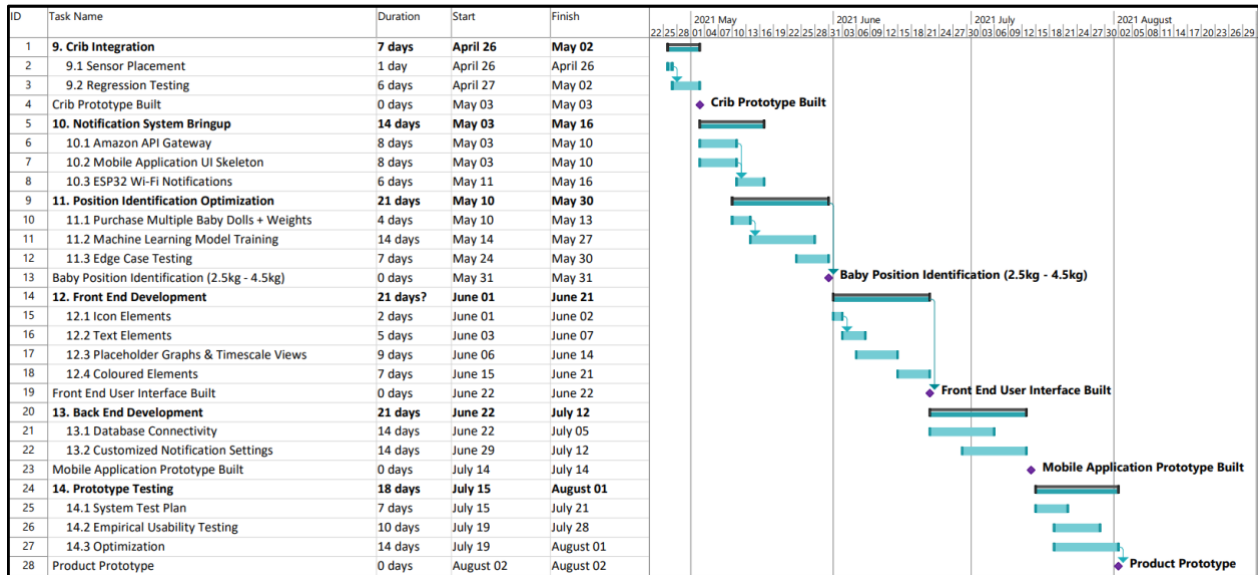


Figure 5.2: Beta Phase Schedule

6. Tenshi Company

6.1 About Us

The Tenshi Company was founded in 2021 by five senior computer engineering students at Simon Fraser University. The word “Tenshi” originates from the Japanese word “Angel”. Acting as the guardian angels for babies, we believe that no baby should pass away due to SIDS and our product aims to mitigate the common risks of SIDS. The Tenshi logo was meant to be simple yet symbolic. To illustrate its connection with angels, a halo is placed on top of the ‘i’ in “Tenshi.”

Additionally, the Tenshi team was formed with the intent to help parents to accurately and efficiently monitor their baby. Despite being students that stem from the same engineering concentration, the Tenshi team brings a wide range of experience through various internships and aims to create an innovative solution to baby monitoring.

6.2 The Team



Alvin David - Chief Executive Officer, Chief Communications Officer (CEO/CCO)

Alvin is in his fifth year and has extensive project management experience. He has led multiple group projects and was the SFU Engineering Science Student Society President from 2019/2020. From his internships in test driven development, he has sharpened his requirement verification and team communication skills. His project management experience is an asset to the team’s success.



Matthew Thomas - Chief Technical Officer (CTO)

Matthew is in his sixth year and has previous firmware development and testing experience. With his involvement in implementing the CI system for Smart Meters, as well as developing and debugging SSD firmware, his technical expertise is essential to the team. Experienced in Python, Perl, C, and C++, his skillset will come into play with the sensor system development.



Denyse Tran - Chief Finance Officer (CFO)

Denyse is in her fifth year with a passion for software development. Through her internship experiences, she focused on developing and testing both web and firmware features. She has experience working with JavaScript, Python, C++, and SQL which are beneficial for the mobile app and database implementation. Her accumulated experiences will support the software development process for this project.



Izyl Canonicato - Chief Marketing Officer (CMO)

Izyl is in her fifth year who is interested in computer architecture and digital systems. She is confident with JavaScript, SQL and C++ in academic environments. From previous internships and hackathons, Izyl has greatly enhanced her hardware debugging, mobile development and circuit design skills. Her skillset is greatly beneficial when working with all three systems for this project.



Dexter Bigueta - Chief Design Officer (CDO)

Dexter is in his fifth year and eager to learn and design apps. With his web development experience from previous internships, Dexter is the mobile app team lead for the Tenshi Baby Crib. Additionally, his passion for developing software plays a key role when integrating the microcontroller to an API and a database. Dexter has worked as a software and web developer and his experience with React is an asset while developing with the React Native framework.

7. Conclusion

As seen previously, we have designed the Tenshi Baby Crib to prevent newborn children from vulnerable situations so as to reduce the occurrence of SIDS. Whilst the baby is in our crib, parents are always aware of their baby's environment and body position. With that information, we enable parents to prevent their baby from overheating, to quickly attend to the baby's distress, and prevent suffocation. With our meticulous crib and mobile application design, our non-intrusive baby monitoring system can support multiple parenting styles without any impact to their current routine.

The baby monitor and crib market has increased as the employment rate of mothers has risen. Alongside this, the market is currently composed of a generation with a technological background. As a result of technology improvements and the majority of adults having a basic technological understanding, AI and smart technology in monitors and cribs has become an industry standard. However, the utilization of this technology has just made these necessary baby items more expensive and difficult for many to use. Current baby monitors often still only offer passive monitoring as opposed to active monitoring. Understanding the target user's needs and concerns has motivated the design of the Tenshi Baby Crib.

Taking contributions from each member of the team and with assistance from the Engineering Science Student Endowment and Wighton Funds, our project design and testing expenses are fully funded. With that, our team at Tenshi Company has extensive experience from project management, mobile application development, and embedded devices which greatly contributes to our product's success. Overall, development of our product is well underway with the Proof of Concept on the horizon and the Prototype slated for August 2021.

In all, the Tenshi Baby Crib is the newest and innovative solution to baby monitoring that is flawlessly embedded into an already essential crib. Just like a guardian angel, parents can be rest assured that our crib system can monitor the baby's environmental health and posture continuously and promptly. By investing in our product, together we can greatly reduce the chances of Sudden Infant Death Syndrome and ensure healthy growth for newborn infants.

8. References

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