

Kids Day Care

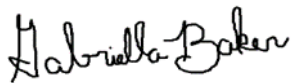
by

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Acronyms and Abbreviations

PRCC = Pleasant Run Church of Christ

AWS = Amazon Web Service

JSON = JavaScript Object Notation

SQL = Structured Query Language

USD = United States Dollars

VSCode = Visual Studio Code

IDE = Integrated Drive Electronics

Abstract

According to the Center of American Progress, over a quarter of people in the United States send their children to daycare facilities. Parents often wonder how their children are at daycares, which is why every daycare facility have daily reports and sign-in sheets. Some daycares have subscriptions with a phone/web app to provide this information to the parents, while other daycares cannot afford those applications. These other daycares rely on paper to provide the information to parents, such as the Pleasant Run Church of Christ Child Development Center. Now, the Kids Day Care app is a mobile application for daycares that couldn't afford these other phone/web app. Our app is an affordable and user-friendly phone application for daycare staff and parents. Teachers are be able to input every child's daily activities at the daycare, and parents thus have access to this information at any moment.

Problem Statement

Introduction

Daycare facilities are very important and useful for many families around the world. When parents or legal guardians have no one to take care of their children daycares offer a solution to step in and help look after the children. Pleasant Run Church of Christ (PRCC) Child Development Center is one option for parents to enroll their children in. For this daycare and many daycares around the world, regulations and protocols are in place that must be followed. One example of a protocol is that teachers must record when a child enters or exits a classroom and which teacher is responsible for the child's movement. This protocol is required to keep track of the children's location and to ensure that the children are not walking alone around the building. PRCC also keeps track of the children's activities (diaper change, food intake, mood, etc.) for the parents. Currently they record this information on paper, using a sign in/out sheet and a series of paper reports. Now, some daycare facilities can afford a mobile/web application to keep these records but unfortunately, PRCC cannot.

Problem

Pleasant Run Church of Christ Child Development (PRCC) is a daycare that is hosted in a church in Fairfield, Ohio. This daycare takes care of ages from infants to school ages. Currently for infants and toddlers, the teachers fill out a daily a paper that contains the child's daily activities, such as, diaper change, food intake, mood, and child's necessities. These daily sheets are given to the parents each day. But for all ages, each child must be signed in and out on the sign in sheet.

For the teachers, this can be problematic because there are days where they forget to hand the daily sheet to the parents/guardian or the sheet gets lost or blown away from a strong wind or simply, the teacher was too preoccupied with watching the other children in the room. The same goes for the sign in/out paper for the children.

As of this moment, there are many applications that can offer the solution that this daycare and others can get however, it comes at a price. According to SoftwareAdvice, the top-rated application is called Procare. On its website (procaresoftware.com), Their lowest price is \$99.00 for 60 children a month but, with that plan if 50% of the payments do not utilize their Tuition Express Feature then another \$100.00 is added to the monthly bill. This application offers a solution to the problems stated above but, at a price that PRCC would not be able to afford.

Another application known as Famly offers a free subscription but, contains limited features such as daily logging but, it does not include a feature to sign a child in or out. According to Famly website (famly.co), the other subscriptions contain other features that can be added with the free subscription. The cheapest subscription is \$76.15 per month. So, with various applications available, they all come with a price that a daycare such as PRCC wouldn't be able to afford or have all the necessary features that they would need with the free subscription.

Solution

The intent of the Kids Day Care app is to turn crucial information that the teachers and the parents can access on a mobile application. In addition, the ability to

sign a child in and out of a room. This application will save the daycare money on not only paper and on ink but, also time on writing the children's name and date on the paper.

Parents/guardian can access it at any time and teachers won't have to worry about forgetting to hand over the daily communication sheet or signing a child in or out. The app contains important information, for example, if the child needs diapers or is low on supplies.

This app focuses on a cheaper price for a daycare like PRCC, could afford and it helps the daycare focus on taking care of the children and giving the parents important information about their child. This mobile application benefits a lot of daycares that are in the same money spot as PRCC. Compared to other apps, the user interface is easy to use. This allows users, who are not tech savvy, be able to quickly and effectively take advantage of the application.

Project Description

Kids Day Care goal is to create a cross platform mobile application where teachers can input daily activities that children have participated in throughout the day as well as maintaining a history of these records. This modern mobile application uses the Flutter framework to allow for a cross platform solution. Flutter is a framework based on the programming language Dart and will run on both IOS and Android devices. This application securely store and retrieve data from a series of tables in DynamoDB. The parent's/guardian's can access this information at any time on their devices. This increases the insight while reducing the likelihood that a crucial piece of data can not be relayed to both the daycare and to the parents.

The remainder of this paper will discuss how this project was completed by. It discusses various important information, such as, the user profile, budget, Gantt chart, etc.

User Profile

We have concluded that there are three roles for this mobile application. One would be known as the teacher. Their role in the application is to enter the children daily activities. For example, the teacher Ms. Susan would record on the app that she changed Cody at 11:35 A.M.

Table 1: User Profile - Teacher shows the user profile of the teacher's role.

The second role is the Administrator (Admin). This role has the same access and privileges as the teacher role but has more access and responsibilities.

Table 2: User Profile - Admin user profile has more information on their role.

The third and last role is the parent/guardian. Their role as parent/guardian is simple. They can install the application and receive updates on their children activities. For example, the mother of Cody is currently on a lunch break at work. She is wondering on how her child is doing so she opens the application and see's that Cody had his diaper changed at 11:35 A.M and he was able to use the potty. So, seeing this and other information, she is pleased that he is being taken care of and having a good day.

Table 3: User Profile – Parent/Guardian shows the user profile for the Parent/guardian

Teacher
<u>Project:</u> Kids Day Care Application
<u>Potential Users:</u> ➤ Daycare teachers ➤ Admin is a teacher but with escalated privileges
<u>Software, Interface, and Related Experience:</u> This project is aimed for individuals that may not have a lot of experience with technologies but have the basic knowledge of how to use an application and how to input information onto the device.
<u>Experience with Similar Applications:</u> ➤ Procare software ➤ EZCare Online ➤ Kangarootime ➤ Kinderlime ➤ ChildWatch
<u>Task Experience:</u> ➤ Basic knowledge on how to use a cell phone to navigate through the application. ➤ Knowledge on inputting data into the phone
<u>Frequency of Use:</u> ➤ Teachers would be using this application hourly to provide daily reports to the parents and signing a child in/out for the day, logging what the child ate, and monitoring the child's diaper content
<u>Key Project Design Requirements that the Profile Suggests:</u> ➤ Easy to use User Interface (UI) ➤ Low cost architecture ➤ Highly redundant store

Table 1: User Profile - Teacher

Admin
<u>Project:</u> Kids Day Care Application
<u>Potential Users:</u> ➤ Manager(s) ➤ Teachers that the managers have selected to have this role
<u>Software, Interface, and Related Experience:</u> This project is aimed for individuals that have some experience with technology. This individual must be comfortable with using technology.
<u>Experience with Similar Applications:</u> ➤ Procare software ➤ EZCare Online ➤ Kangarootime ➤ Kinderlime ➤ ChildWatch
<u>Task Experience:</u> ➤ Basic knowledge on how to use a cell phone to navigate through the application. ➤ Ability to input data and select options on the mobile device.
<u>Frequency of Use:</u> ➤ Admins are teachers with escalated privileges so when they are a teacher in a classroom, they take the role as a teacher. They use the application hourly to report the children daily activities (changing diapers, eating, nap time, etc) ➤ The following will occur each time a new child gets enrolled, so it depends on that factor ○ They can use it to add new children. ○ They can create an account for the parents when they enroll their children.
<u>Key Project Design Requirements that the Profile Suggests:</u> ➤ Easy to use User Interface (UI) ➤ Low cost architecture ➤ Highly redundant store

Table 2: User Profile - Admin

Parent/Guardian
<u>Project:</u> Kids Day Care Application
<u>Potential Users:</u> ➤ The parents or guardians of the children that are enrolled in the daycare
<u>Software, Interface, and Related Experience:</u> This project is aimed for individuals that may not have a lot of experience with technologies but have the basic knowledge of how to use an application.
<u>Experience with Similar Applications:</u> ➤ Procare software ➤ EZCare Online ➤ Kangarootime ➤ Kinderlime ➤ ChildWatch
<u>Task Experience:</u> ➤ Basic knowledge on how to use a cell phone to navigate through the application. ➤ The ability to install applications on their mobile device ➤ Ability to follow instructions on how to set up their account
<u>Frequency of Use:</u> ➤ Parents or guardians can use the application at any time they want. The frequency of use depends on the parents/guardians. One parent may use it once a day, while another uses it three times day.
<u>Key Project Design Requirements that the Profile Suggests:</u> ➤ Easy to use User Interface (UI) ➤ Low cost architecture ➤ Highly redundant store

Table 3: User Profile – Parent/Guardian

Use Case Diagram

Figure 1: Use Case Diagram shows all the user's profile and how they interact with the system.

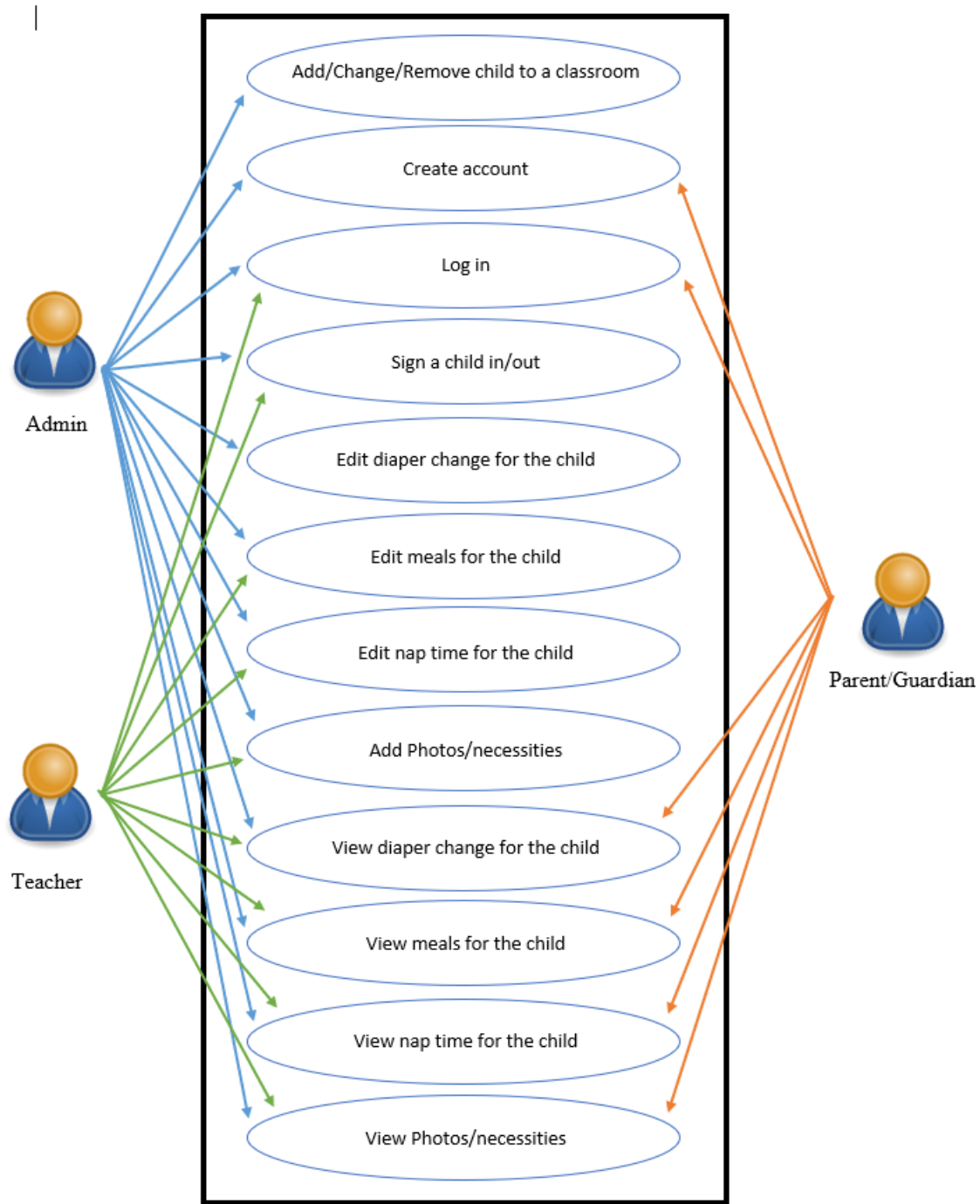


Figure 1: Use Case Diagram

Project Management

Budget

This budget is based on utilizing the Always Free Tier on AWS. All pricing information comes from AWS and is current as of 11/08/2019. This budget is based on containing up to 20 GB of data in DynamoDB and up to 1 million API Gateway requests. With these calculations this budget is good up to 33,333 API requests a day, which for a daycare of 50 kids is more than enough. The expected app utilization is approximately 25000 requests in production (50 requests per hour at 12 hours a day, with 7,000 unique parent interactions per month). This expected interaction still leaves overhead for any additional parent interaction or an increase in children at the day care facility.

CATEGORY	ITEM	DESCRIPTION	EXPECTED COST	ACTUAL COST
Materials	Hardware	All Hardware that will be used to run Kids Day Care		
	DynamoDB	NoSQL Database	\$0	\$0
	Lambda	Serverless Code Execution	\$0	\$0
	API Gateway	AWS managed API Service	\$3.50	\$8.50
	Simple Queue Service	AWS managed queuing system	0\$	\$0
	Key Master Service	AWS Key Management Service	0\$	\$0
	Software	Flutter and Python Languages.	\$0	\$0
	Actual Wage Costs	The actual wages that will be distributed for development of the project.	\$0	\$0
	Simulated Wage Costs*	The predicted wages that would be distributed if the project were done in the current market. (We will assume 2 developers making \$35 USD / hour).	\$5600	\$5775
TOTALS			\$3.50	\$8.50

Table 4: Budget

Objectives/Deliverables

Kids Day Care app was inspired by Gabriella's experience while working at a daycare. Our "Big picture" view of the project is to create an affordable mobile application with an easy to use interface. In PRCC Child Development Center, many of the teachers are above 50 years old so they are not too comfortable technologies, with an exception of using a cell phone.

In the beginning of the fall semester, we had a goal of creating an application that contained all of the features that we listed in the team contract. Due to time and troubleshooting, we had to abandon a couple of the features so that we can create a functional mobile application by the expo.

By the end of Spring 2020, we had to remove the deliverable of a notifications to the parent, if the child has been absent for more than a couple days without notifying the daycare. This notification is meant to let the daycare know that the parent wishes to continue enrollment in the daycare. Due to time, we had to remove this, but our application still contains the features that meets the projects goal/objective. Our app features include the following:

- The teacher is able to input the child's mood, diaper change, food/liquid intake, etc.
- The teacher can input the sign in/out of the child and who brought the child in/out.
- The parents/guardian can view their child daily activities at any time.
- Administrators can enter a new child into the database
- Teachers, parents and administrators have account management, such as their passwords, usernames, emails, etc.

Project Milestones

This section contains details about the important milestones for our project. *Table 5: Fall Project Milestones* represents the milestones for the fall semester and *Table 6: Spring Project Milestones* represents for the spring semester milestones.

Major Project Milestones Fall of 2019	
Team Contract	10/14/2019
Project Abstract	10/14/2019
User Profile & User Case Diagram	10/21/2019
Created Wireframes: Teachers & Parents	11/15/2019
Application Development Begins	11/15/2019
Logos/Icons – Hire and Receive	12/20/2019
Draft Report	11/10/2019
Oral Presentation	12/02/2019
Final Report	12/02/2019

Table 5: Fall Project Milestones

Major Project Milestones Spring 2020	
Wireframes: Administrators	1/15/2020
Application Development for Administrator Role	2/01/2020
Creating a Testing plan	2/10/2020
Revised Abstract	2/17/2020
Tech Expo Draft Poster	3/02/2020
Tech Expo Final Poster	3/16/2020
Oral Presentation	3/31/2020
Testing the Functionality of the App	4/06/2020
Final Report	4/13/2020
Tech Expo	4/14/2020

Table 6: Spring Project Milestones

Figure 2: Fall and Spring Gantt Chart is our fall and spring schedule for the 2019-2020 school year

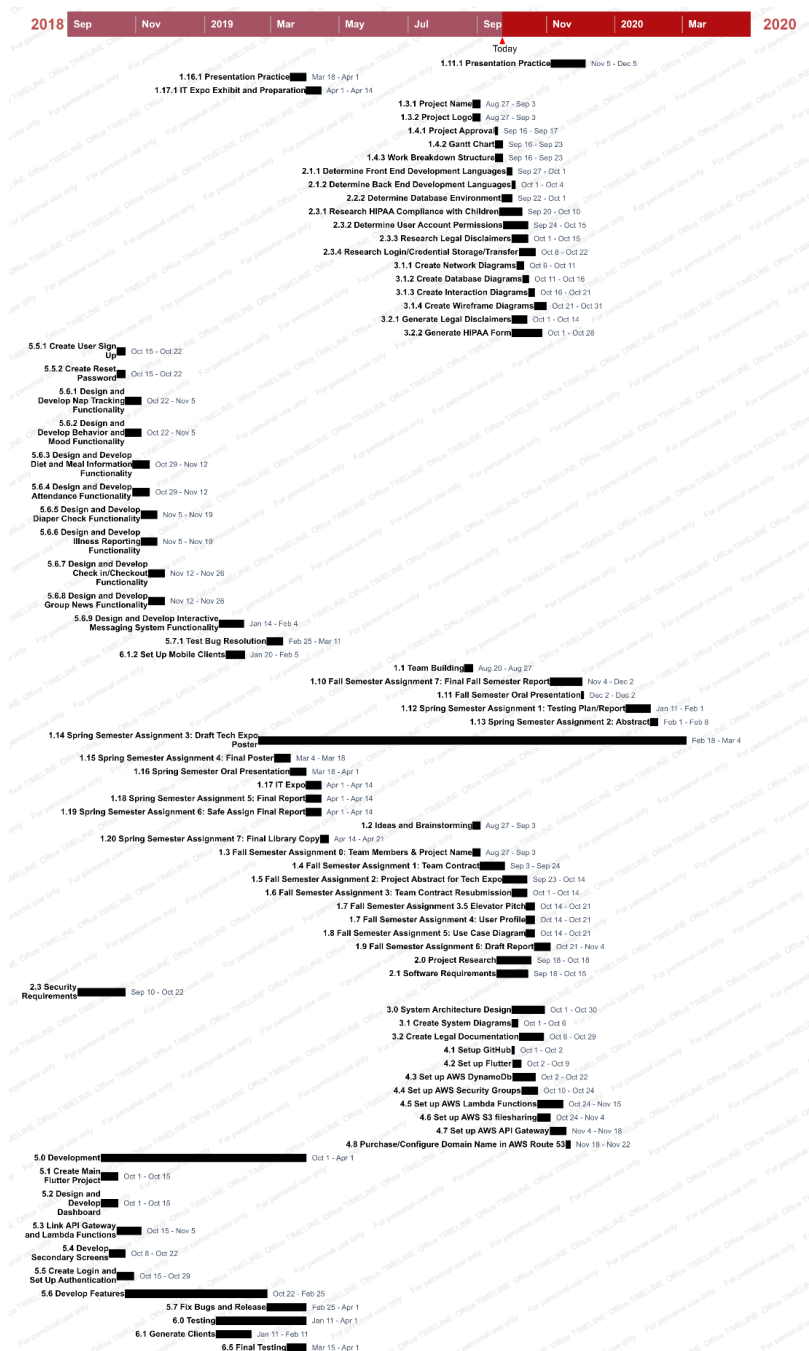


Figure 2: Fall and Spring Gantt Chart

Technical Elements

An application can have many different design architectures. There are many pitfalls and design choices that will impact the scalability, usability, cost and maintenance of any application. Therefore, a solid design architecture is crucial to the longevity and the success of an application. A breakdown of Kids Day Care's software architecture is depicted below in Figure 3: Kids Day Care's Software Architecture.

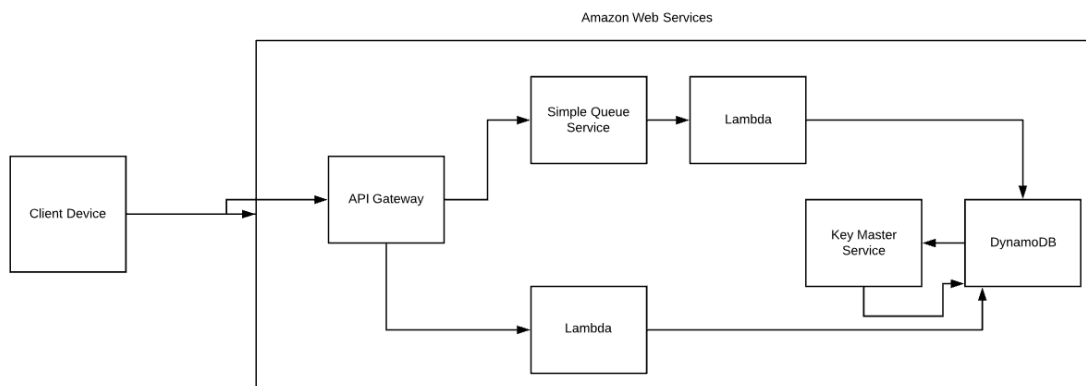


Figure 3: Kids Day Care's Software Architecture

We chose this design because we wanted an application that is easy for the user and the programmer/IT which is our goal. Such as being serverless, simple user interface, etc. Below, we take an in-depth look at the design and architecture of the Kids Day Care application.

Network

Kids Day Care is hosted on AWS. While hosting on AWS we took advantage of the various serverless services that AWS provides. Kids Day Care utilizes a serverless architecture that could scale to near infinite potential. This architecture allows a small team to spend more time developing the application and its corresponding enhancements without worrying about managing the hardware behind the scenes. This gives KidsKids

Day Care an increased uptime since the serverless services can be run in different regions, therefore if one AWS region is experiencing an issue, Kids Day Care can continue to operate with minimal impact to the application. This network architecture allowed us to provide better uptime and development speed for the Kids Day Care application.

Application

The Kids Day Care frontend is built using the Flutter framework. The flutter framework is a cross compatible mobile solution that allows us to develop on both IOS and Android simultaneously. The Kids Day Care backend is built on an AWS services stack that consists on API Gateway, Lambda, SQS and DynamoDB. Within the AWS Lambda functions the programming language Python will be utilized.

Database

Kids Day Care utilizes the AWS service DynamoDB for the data storage. DynamoDb is a NoSQL database that allows for lightning fast response times and its simple data storage structure JSON. This allowed us to provide the end users with snappy response times and increase in ease of development by passing the data to and from the application and database in the JSON data structure.

Security

All Kids Day Care data is stored in an Encrypted DynamoDb database using the AWS Key Master Service. Our configuration of this service creates a private key that rotates every 15 days. Without this key, the data is unable to be retrieved. Between the

front-end and the backend, HTTPS is utilized exclusively to provide secure communication.

Application Screenshots

The following are a few screenshots of our application. *Figure 4: Login Screen* is the login screen that all users get when they access the app. As a teacher/administrator, you will receive the “Select Classroom” screen, as shown as *Figure 5: Select Classroom Screen*. For the parents, they will get the “Select Child” screen, as represented in *Figure 6: Parents – Select Child Screen*. The *Figure 7: Teacher - Select Action Screen* is the screen that the teachers select what activity they want to add, such as, diaper change, nap time, etc.

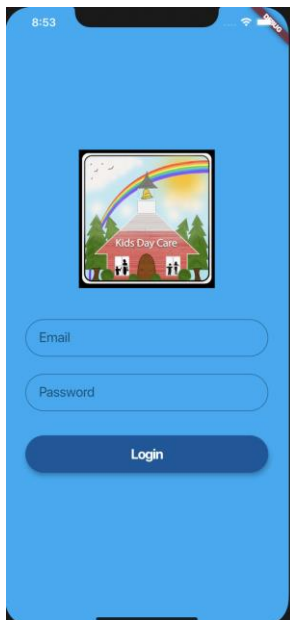


Figure 4: Login Screen



Figure 5: Select Classroom Screen

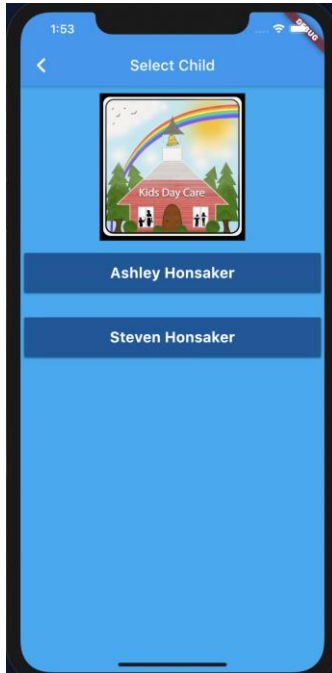


Figure 6: Parents – Select Child Screen.

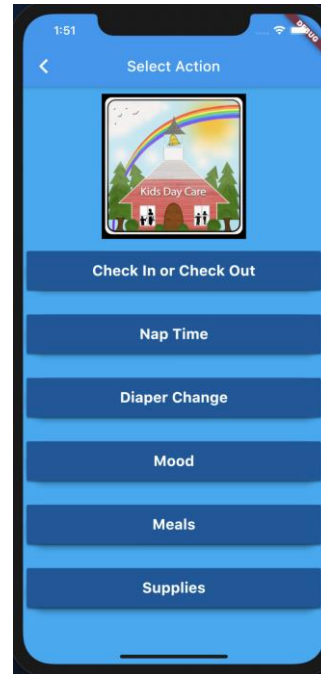


Figure 7: Teacher - Select Action Screen

Troubleshooting

One problem that we ran into as a team was getting the Flutter platform to run on the IDE VSCode, this was due to the flutter dart configuration file not downloading with the package. The recommended fix for this issue was to download Android Studio and configure flutter using the built-in installer. This properly installs all the necessary flutter components. Once all the necessary files were installed, we could then reference these files into the VSCode and run flutter as expected.

One unresolved problem that we ran into while developing this application was the age of the Flutter platform. Since flutter is still a new language, there is significantly less community involvement in troubleshooting and documentation. Coming from a mature language like Python, Flutter still has many unresolved issues and it is not yet widely used in large production applications. Since this is the case the solution to many

of the common language issues are not yet available in widely used formats such as Stack Overflow or Medium.

One minor problem that we ran into was when Steven's laptop broke. It was on the day of presentation, so we had to borrow a computer from a friend of ours. Our project is backed up in GitHub, so we didn't lose our entire project.

As for the Spring semester, our main issues was with the coding language, Flutter. For example, the user interface was misplaced and the code structure of the project. So in other words, we were having difficulties on making the app look the way that we want it to. Our solution to this was reading documentations.

Test Plan

Scope of Testing

The scope of testing has been listed below. We have chosen these testing methodologies because they cover the most functionality and features for the mobile application from phone capability to the developers coding.

These Testing are:

- Integration Testing for Mobile Platforms: We test on various mobiles to ensure that the application works on all types of mobiles (Pass/Fail)
- Application Functionality Testing: Users will test all features and buttons of the app to ensure they meet the proposed requirements and that the Kids Day Care application works as designed.
- Unit Testing - Developer Testing: As the code is being written, the developer tests that their code is working.

Logging Test & Procedures

As mentioned, we will be conducting various test to test our application to ensure functionality for our customers.

Integration Testing for Mobile Platform

Kids Day Care application is a cross-platform application, which means that it works on all types of mobile devices. So, we must test this to ensure that this is true. So, we will be conducting a pass/fail test by testing it on an emulator. An emulator is a Virtual machine that runs various phones, and this will let us test our application. *Table 7: Integration Testing for Mobile Platform table* shows the mobile devices that we tested on with the results.

Mobile device	Pass/Fail
iPhone X	Pass
iPhone 8	Pass
Galaxy 8	Pass
Note 7	Pass

Table 7: Integration Testing for Mobile Platform table

Application Functionality Testing

This testing ensures that the applications buttons and screens are working properly and together. We will be conducting a pass/fail test. *Table 8: Application Functionality Testing table* contains the tasks that we are testing on with the results.

Tasks	Pass/Fail
Input Email and Password	Pass
Signing in works	Pass
Choosing child/Classroom	Pass
Choosing category (Diaper, Food, etc.) working properly	Pass
Back track from current to previous page	Pass
Home page working	Pass
Entering nap time works	Pass

Table 8: Application Functionality Testing table

User Interface Testing

We have chosen users to do various tasks to test our user interface. They will provide us the level difficult for the task. There are three roles that the user will be for the testing.

They are:

- Teacher
- Parent
- Administrator

Each role has different permissions and roles on the application. So, we are testing all roles to ensure that the application works for everyone.

Table 9: User Interface Testing – Teacher contains the tasks that the tester will be doing as a teacher.

Teacher	
Task	Level of Difficulty (1 star-easy; 5 star-Very Hard)
Sign in	
Sign Steven in	
Log Steven snack (ate most of his milk and crackers)	
Log Steven sleep (12:45pm – 3:00 PM)	
Change your password	
Sign out and sign back in with the new password	
Sign Steven out	

Table 9: User Interface Testing – Teacher

Table 10: User Interface Testing – Parent contains the tasks that the tester will be doing as a parent.

Parent	
Task	Level of Difficulty (1 star-easy; 5 star- Very Hard)
Sign in	
Choose Child 1	
View child 1 lunch	
View child diaper change	
View Account	
Log out	

Table 10: User Interface Testing – Parent

Table 11: User Interface Testing – Administrator contains the tasks that the tester will be doing as an administrator.

Task	Level of Difficulty (1 star-easy; 5 star- Very Hard)
Sign in	
Add Becky into the system (a child) put fake names & info about the parents	
Sign Becky in	
Enter Diaper change (10:15 am Wet)	
Log out	

Table 11: User Interface Testing - Administrator

Test Results

We converted tables 9-10 into an online survey from Google, known as Google Form. This contains all the tasks that are mentioned in *Tables 8-10*. You can access the form through this link: <https://forms.gle/V9JYf9W9ychH4yy27>

Figure 8a-f: Google Form Screenshots Results shows us the results from the survey.

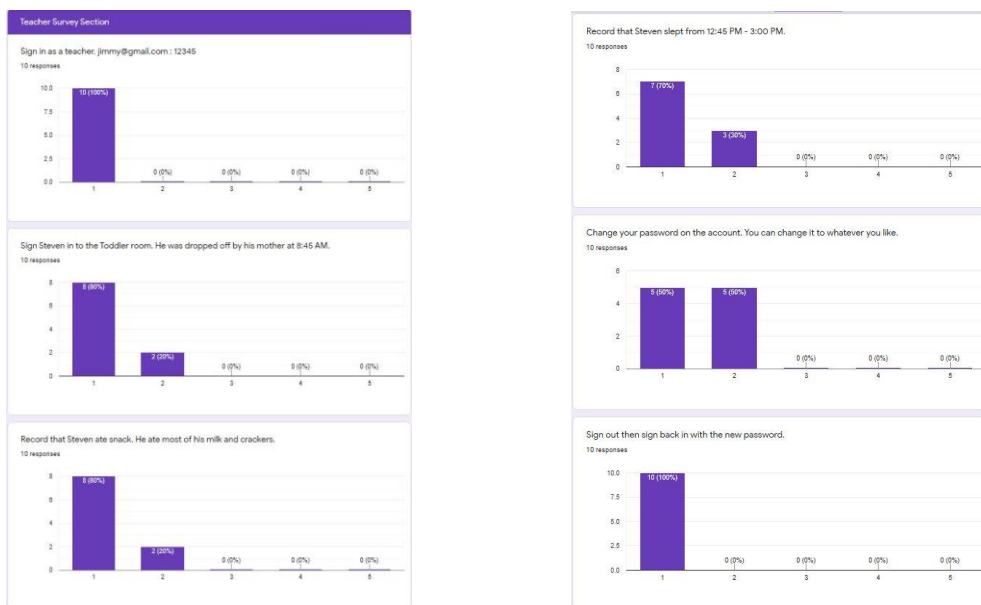


Figure 8a-b: Google Form Screenshots Results

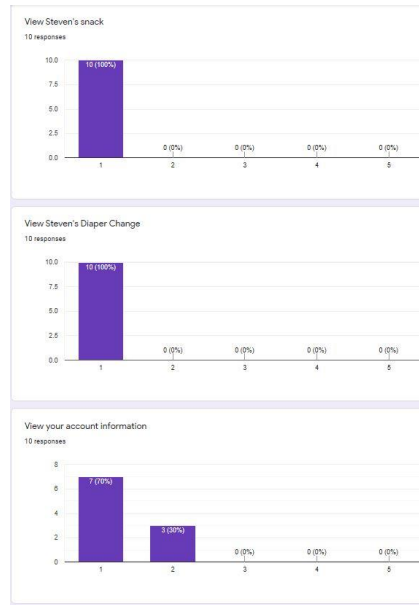


Figure 8b-c: Google Form Screenshots Results



Figure 8d-e: Google Form Screenshots Results

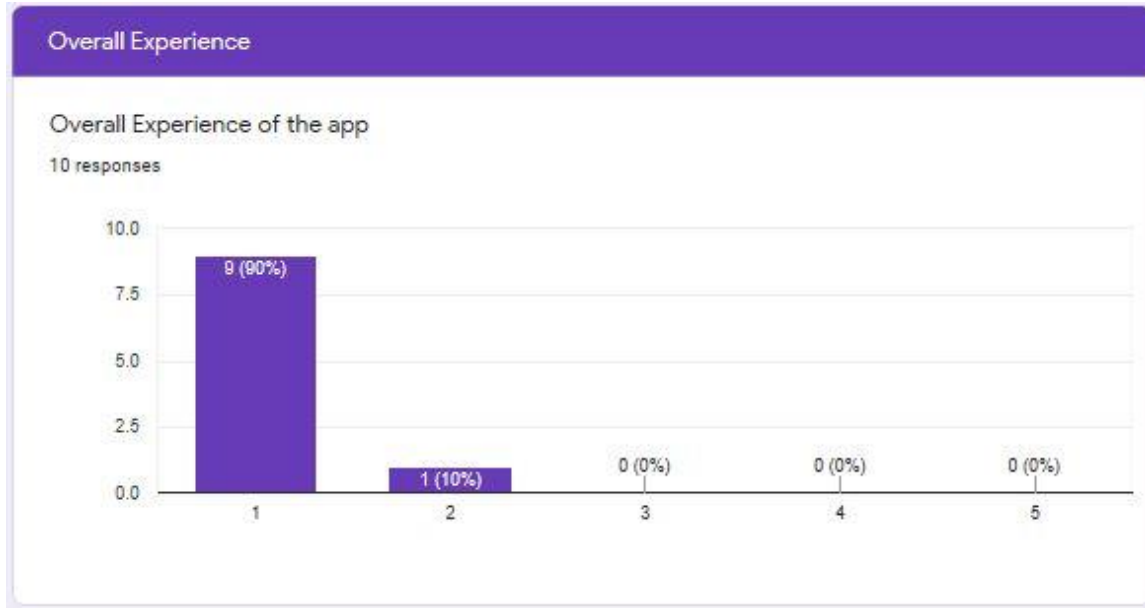


Figure 8f: Google Form screenshots Results

Unit Testing- Developer Testing

As the developer(s) create new code, he/she runs a test to ensure that the code is working properly. We use the unit test to test the modules as they are completed. Upon completion of a screen/feature, we test the UX.

What We Learned During Testing

Testing a new technology/application is very crucial because it helps to identify the bugs that exists. What we learned from this is to research about survey tools first and see what survey tools we could use and which would benefit us the most. We say this, because we used Survey Monkey first, but they said that our survey violated their terms and they disabled our account. We then thought of using an alternative and Google Forms seemed to be the best option. We wasted 2 days on Survey Monkey and we wished we

looked into other options, first. After creating the surveys on the Google Form, we were able to resend the surveys to the testers.

Conclusion

Fall Semester 2019

As a group, this semester was a rollercoaster of events, but we learned a lot. We learned that the classes that you take in college can help you prepare for the real-world. Together, we used the knowledge that we gained in Human Computer Interaction by creating wireframes. By doing these wireframes, the programmer would be able to get the visual representation of what the interface would look like. Also, working as a team is very crucial. Steven and I were able to support each other and cancel out our weakness. By this, we mean that person 1 could be good at writing papers while person 2 isn't, but person 2 has better researching skill than person 1. So, by working together, person 2 could research and person 1 can turn the research into a great paper.

We were able to learn a new programming language. In fact, flutter is a new language in the world, so it was neat to learn and challenging since there aren't many help pages on the internet yet. Another skill that we have gained is how to project manage a project. These are great experiences for us to put on our resume.

Our plan for Spring 2020, is to complete the mobile application and conduct a user testing by receiving feedback from friends/families. Also, we will try to get feedback from Gabriella's co-workers. These feedbacks will help us improve our mobile applications. During the spring, we would also be working on our IT Expo presentation.

Spring Semester 2019

This semester went by fast and we got a lot of work done. We were able to complete our project on schedule and presented our final presentation to our advisors. For this semester, we had to complete the development milestone and work on preparing for the IT Expo in April, as well. For the project, we worked on creating the back end and continued to code our application. We also created a Test plan, to test our finished application. We tested in various ways, such as the functionality, the integration on various types of phones and we had users tested as well. In the technical aspect, we learned a new program language known as Flutter. As mentioned before, this is a new language which does not have a lot of help pages out there, yet. In addition, we have learned that there are a lot of testing that new technologies must go through. This ensures that there are no bugs and that it is user friendly.

As for preparing for the IT Expo, it was a confusing time. As we were reaching the end of the semester, our classroom had to convert from in-person to online class due to the world epidemic regarding COVID-19. Our IT Expo turned Virtual and we had no clue to how it was going to be like. We had to pay close attention to Professor Scott's emails and announcements. Our final presentation was through Zoom, a remote conference service. Before the epidemic occurred and school closings, we created a very strong poster for the IT Expo (*Appendix B*). We learned that PowerPoint is a very strong tool for making other design materials, such as flyers, posters, brochures, etc. We enhanced our knowledge about the tools in PowerPoint, and we learned about a new remote conferencing service, besides WebEx. From the Expo, we learned that we have to be fully prepared.

Future Recommendations

In conclusion, these two semesters were full of learning and development. We accomplished our goals/deliverables of this project. We wish we had more time because we would be able to improve the user interphase and be able to implement the deliverable that we could not do. If we could do it all over again, we would start earlier than we did but we don't think we would change the project. We had a lot of passion for this project and it is shown in our work. We have received a suggestion to implement a notification to notify a parent if a child received a food item, that they were not supposed to. This could be a feature that could be added in the future, but it would be considered an Accident/illness report that teachers fill out, if it was a major impact (ex. Allergic). For minor impact, the daycare would contact the parent(s) or notify them when they come to pick up the child. In the beginning, this was an idea we wanted to implement but we put that in the "future feature" bucket. Our plans for our app is to not put it in the market due to the reason that Steven and I have different future in the IT world.

Appendix A. References

“Daycare Software.” Software Advice. Accessed October 3, 2019.

<https://www.softwareadvice.com/child-care/>.

“Pricing.” Famly. Accessed September 15, 2019.

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Appendix B. Tech Expo Poster

Figure 9: Poster represents our poster that will be at the IT Expo.

Kids Day Care

University of CINCINNATI

About

Over a quarter of people in the U.S send their children to a daycare facility. The Kids Day Care app is a phone application for daycares that cannot afford other phone/web applications that are currently in the market. Teachers will be able to input every child's day at the daycare, and parents thus have access to this information at any moment.

Problem

- Daycare facilities fill out daily forms about the children's day (Ex. Diaper change).
- Current applications offer an application to do this task but:
 - May be too expensive for the daycare
 - The free subscription app may not have the features that the daycare would like.
 - The desired features can be added but with cost

Our Solution

The Kids Day Care mobile application will allow teachers and parents to record/view the children's daily activities.

Teachers

- Sign a child in/out
- Record children's daily activities
- Ex: Diaper Change

Parents

- 24/7 Access
- To view children activity

Technical Elements

Back-end

Amazon Web Services

SQS, DynamoDB, Lambda, API Gateway

python

Front-end

Flutter

Benefits

- Aa Affordable
- Ff User Friendly
- Ss Small Daycares

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Figure 9: Poster