

Get It Done
By
Phoning It In

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Capstone Project Spring, 2020

The University of West Florida

1/28/2020

CIS4592 Capstone Systems Project

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Executive Summary

Get It Done is an event planning application, for android devices, which will allow users to plan events with tasks that the user associates as needed for completion for the event to be possible. Each event will have the ability to have multiple users, selected by the event creator, interact with the task list to mark as completed or not completed. This will allow for the distribution of the event planning workload. Once a user has completed the task, the user can confirm it's completion by taking a picture, which is then distributed to the rest of the users planning the event.

Get It Done will be developed for use on Android devices. The team will develop this project using API 19 (KitKat) on Android Studio. The code for the application will be stored in and pulled from the group's GitHub repository. New branches will be produced for each new method that will be developed. JUnit will be used to conduct unit tests for methods. An AWS server will be created to be used for multiple functions to support the application. The server will create and maintain threads for each client that is logged in. Relational databases will also be stored in the server to store information on user login credentials and events that have been created.

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1 Expected Project Requirements

1.1 Main Components

1. Android Device
2. AWS Server
3. Databases to hold user credentials, events, and tasks associated with the events.

1.2 Component Interaction

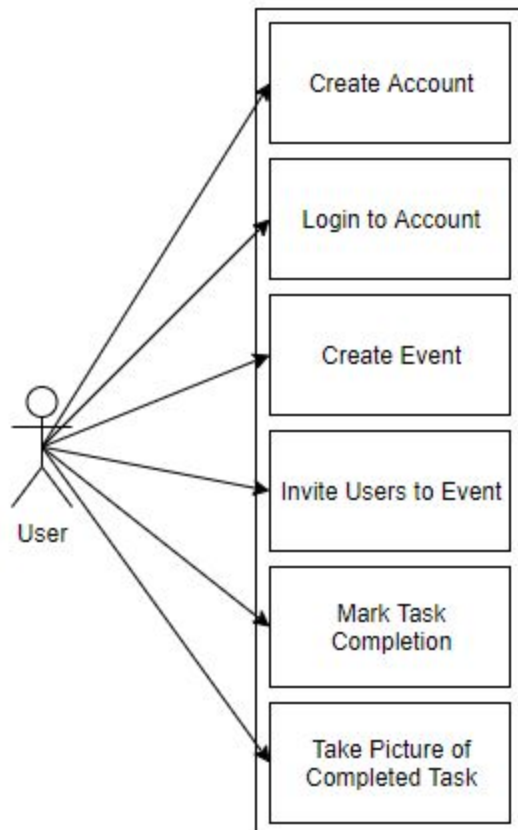
The client android device will connect to the AWS Server which is running multiple other client threads. The AWS Server will also contain the database. When a user creates an account, the table holding user credentials will create a new entry. When a user creates an event with tasks, the database table holding Events will create a new entry and the table holding tasks will create entries for all the tasks and relate them to the event. Users can also be added to an event. When this occurs, the users in the User table will be related to the event. As tasks are completed by the users, the database will be updated. The server will then update the android client threads, showing the change for each user.

1.3 User Stories

1. As a Host, I would like to have event cards; with the purpose of describing an event.
2. As a Host, I would like to set event item requirements; with the purpose of organizing what people bring to the event.
3. As a Host, I would like to be able to invite people; with the purpose of organizing an event.
4. As a Host, I would like to have pictures; with the purpose of verifying a completed item.
5. As a Host, I would like for quick synchronization amongst all participants; for the purpose of being informed of completed tasks.
6. As a Client, I would like to be able to mark an item as completed; for the purpose of informing other users and preventing task duplication.

7. As a Client, I would like to be able to associate a picture to a completed task; for the purpose of proving task completion.
8. As a Client, I would like to be able to sign into my account; for the purpose of accessing my events and tasks.

1.4 Use Cases



2 Anticipated Development Model

The team is planning on using an agile development process known as Scrum. This framework will allow for the team to deliver a viable product while also allowing for the team to adjust to any sort of complex problems that may present themselves. Scrum will specifically allow the team to have rapid feedback on assignments due to daily meeting aspect of the methodology.

3 Preliminary Assignments

3.1 Team Members and Roles

Cesar Santiago - Group Lead/ Product Owner

Joey Quinn - Security Lead

Sean McMillon - Engineering Lead/ Scrum Master

Mason Riley - Testing Lead

3.2 Roles and Functions

The team decided the best methodology to use would be the Scrum model which is an agile development model. Scrum defines three important roles; the product owner, the scrum master, and the development team. Due to the size of the team being only four members a couple of the members will be filling different roles to facilitate this. The basic roles being filled are the group leader, the security lead, the engineering lead, and the testing lead.

The group leaders main responsibility is to keep the team on the established schedule and to organize the meetings and submission of the planned deliverables throughout the course of the project. The security leads main responsibility is to make sure that the databases being used in the project are not vulnerable to any type of attacks. Due to the nature of relational databases this will mainly be making sure SQL injection is not possible. The engineering lead is the head coder. They will be making sure the team has a clear idea on what is being worked on and what the next step in development is. The testing lead is who will be carrying out the unit testing during development.

The product owner will be our group leader which was appointed by the team. This role is responsible for ensuring that the team is delivering the most value. The product owner has to understand the customer and know the value that the team is delivering.

The scrum master is responsible for ensuring that the scrum is going as planned. They work with the product owner to make sure they understand the value of what is happening. They will also work with the development team to deliver the product that has been planned. This is all done by the scrum master holding daily meetings with the team and gather information on things that have been done, things that still need to be done, and what is currently keeping certain things from being done.

The scrum team will consist of all four members of the team due to the size of the project.

4 Anticipated Strategies and Tools

Every component of the application will require testing. This is due to the reliance on relational databases for storing user login credentials and storing the event in a database as well. This will be done through Unit Testing. Unit Testing is being used so the team can test individual components which ultimately allows for the validation of each individual piece of the software being developed.

Components that require specific testing will be the databases themselves. All databases will be hosted on the same Amazon Web Services server. The team plans on testing for SQL injection on each separate database.

The testing tools the team is planning on using is JUnit which is already a part of Android Studio. JUnit is a simple easy to use testing framework which will allow for us to write repeatable tests that can be run at several points in the development cycle.

5 Preliminary Timeline

5.1 Project Timeline

Project Plan: 01/31

Sprint 1 Planning: 02/1 - 02/3

Sprint 1: 02/4 - 03/2

2nd Presentation: 03/3

Sprint 2 Planning: 03/4 - 03/7

Spring Break: 03/8 - 03/13

Sprint 2: 03/14 - 04/13

Final Presentation and deliverables Submission: 04/21

5.2 Methods of Progress Tracking

The team will be using a combination of tools for tracking the progress of the project. The main benefit to using the Scrum methodology is that tracking progress is very easy due to the daily reporting that has to be done. A long with the daily reports we will be holding weekly meetings that will be done either in person at the University of West Florida or through discord.

For tracking the actual state of the project we will be using GitHub to track the features that have been completed and still need to be worked on.

6 Project Risk/Success

6.1 Defining Project Success

The team defines project success if they are able to deliver a working mobile to-do list application that is able to run android devices. Using the agile methodology of software development this means delivering a minimum viable product to the customer. This minimum viable product should have enough features that will attract users to the application and keep them using the application.

6.2 Anticipated Problems

There are a few speed bumps we are anticipating with the development of this application:

1. Not everyone in the team has experience using Android Studio.
2. Not everyone in the team has experience with unit testing.
3. Not everyone in the team has used GitHub in a collaborative effort with branching.
4. Not everyone in the team has hands on experience using SQL databases.

Each problem is relatively simple and with some practice are hurdles that should be able to be easily overcome.

7 Acknowledgements

This work was conducted as a part of the Spring 2020 Capstone Project Systems CIS4595 class conducted by Dr. Bernd Owsnicki-Klewe. The development team is; Cesar Santiago, Joseph Quinn, Sean McMillon and Mason Riley.