

Team Name - Decoders

## Team No# 20

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## **Contents**

Project Goal and Objectives	2
Motivation	3
Significance/Uniqueness	3
Objectives	3
System Features	4
Second Increment Report	4
Existing Services/Rest API	4
Detail Design Features	4
User stories	11
Testing	14
Implementation	
Deployment	24
Project Management	
Bibliography	25

## **Project Goal and Objectives:**

#### **Motivation:**

In today's busy life, resource monitoring has become a big issue because of the growing work pressure and social pressure we may forget the things we had lent. I had a real-time experience with this kind of situation. I had lent a book to my friend which I found to be very motivational and interesting but I forgot to take it back. After few months, I thought of reading the book again and searched for it but I cannot find it. I was not able to recollect where I had kept the book or whom I had given to. After two years, when my friend was shifting home, he found the book in their store room and returned it to me asking apologies for the mistake. Most of my friends tell me that they faced a situation like this in their life. So, we thought that there is need to develop a resource management system for people. The application can be used for keeping record of the items being borrowed by individuals. As smart phones are becoming part of our lives, it is the best choice to deploy our resource management system.

#### **Objective:**

The application mainly aims at keeping track of various items such as books, tablets or any other devices either by a barcode scan or by taking a picture manually even by entering the current location of borrower. The scope of this application is that it can be used by anyone who wants to keep track of their belongings.

## Significance/Uniqueness:

Although there are other applications which can remind you of the things which you have lent, our application differs from them because of the following features:

- The applications which are present currently can remind you just with the text
  which you had written for that reminder, but in our application, we had
  incorporated two new features as the user can associate a picture with it or he can
  have a bar code scan for the item which he is lending. The reminder in our
  application will show you that information also.
- In our application, a message (either a text message or an email) will be sent to both the lender and the borrower saying that the due date is approaching for the item. This will ensure better security.

#### **System Features:**

The resource monitoring app can be used to keep track of items. The system features include:

- Users can scan the item that they are lending, and then enter the details of the person whom they are lending it to.
- They can also store the information of the items that do not have a barcode, this
  can be done by taking the picture of the item manually and storing the details of
  the borrower.
- Send Email or text message to the borrower as a reminder
- Uses SQLite database for the implementation of storing the details
- All the details are stored in a List View format and can be viewed from history  $\Box$  Delete the details when we get back the item.

## **Second Increment Report:**

## **Existing Services/REST API:**

API's Used: Facebook Login API and Google API.

#### **Detail Design of Features:**

Wireframes:

Login Page:



## Register Page:



#### **Home Page:**



#### **Manual Entry:**



#### **Product Search:**



#### Scan Item:



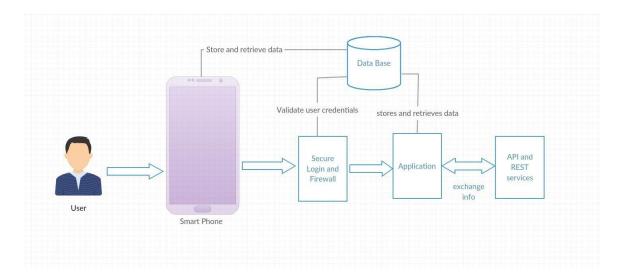
#### **History:**



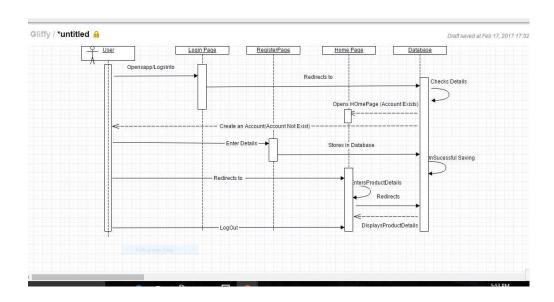
#### Selecting an item from history:



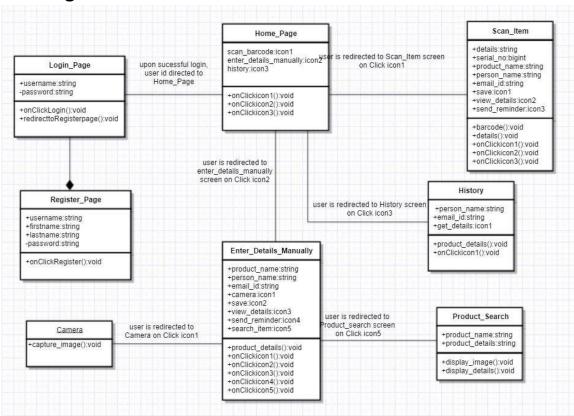
## **Architecture Diagram:**



## **Sequence Diagram:**

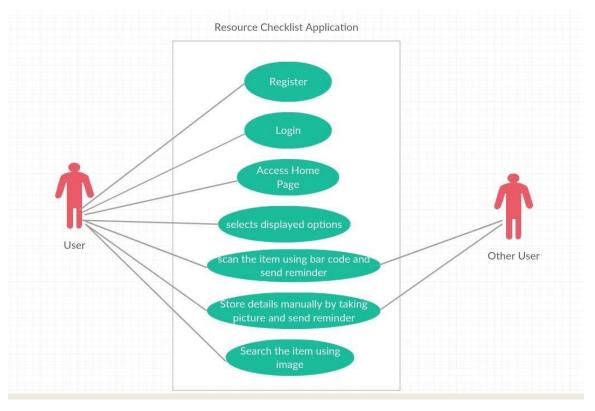


## **Class Diagram:**



Page

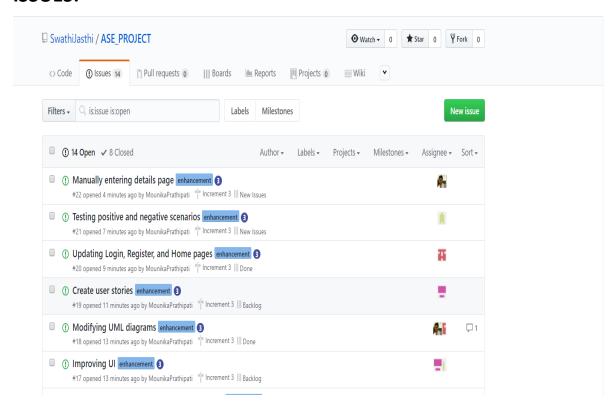
#### **Use Case:**



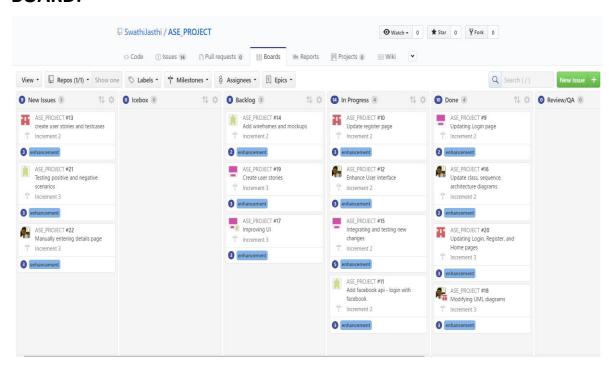
#### **User Stories:**

- 1. Plan the increments to create resource management application.
- 2. Finalize the project plan and document the revised project plan.
- 3. As a user, I should be able to login into the resource checklist application.
- 4. As a user, I should to have options to register to the application to use it.
- 5. The user should be redirected to the Home Page after a successful login.
- 6. The user should have two options to enter a product details. One is through Barcode scanning and the other is to enter the details manually.
- 7. Being a user I can scan the item through Barcode Scanner and able to add it to my database using SQLite to history.
- 8. Sending text message or Email to the corresponding borrower to remind him saying his due date is approaching.
- 9. Sending remainder to the person repeatedly from history by selecting the corresponding item.
- 10. I could be flexible in erasing item details from history if I do not want anymore.

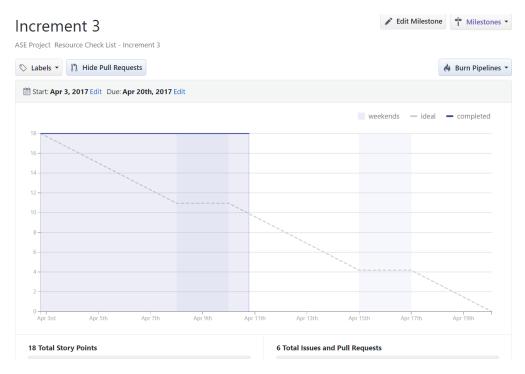
#### **ISSUES:**



#### **BOARD:**



#### **BURNDOWN CHART:**



## **Testing:**

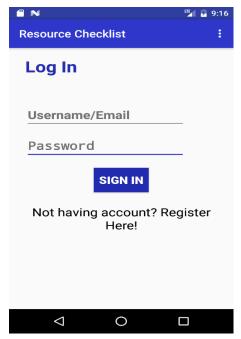
## **Unit Testing:**

User Story Number	Test Case Description	Expected Result	Test Result
3	Enter invalid mail ID and valid password	Error message should come as "invalid credentials"	PASS
3	Enter valid mail ID and invalid password	Error message should be displayed as "invalid credentials"	PASS
3	Enter invalid mail ID and invalid password	Error message should come as "invalid credentials"	PASS
5	Enter valid mail ID and valid password	User is redirected to Homepage successfully	PASS
4	Enter a word without @gmail.com at the end of the string in email ID field	Error message should be displayed as "enter valid mail ID"	PASS
4	Enter a password with length less than 4 characters	Gives error message "password should have minimum of 5 characters"	PASS
4	Enter two different passwords in password field and confirm password field.	Gives error message "passwords do not match"	PASS
4	Enter all the fields in register page correctly	User is redirected to home page successfully	PASS
7	Scanning the item through Barcode Scanner	Scanning the Barcode	PASS
7	Details are to be saved	Displaying the saved results	PASS
8	Sending the reminder to the corresponding person	Reminder sent	PASS
9	After Sending the reminder the details are to be saved	Details are saved and can view in history	PASS
10	Flexibility in clearing the unwanted data	Cleared the data	PASS

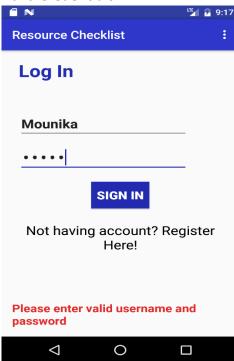
## Implementation:

The "Resource Checklist" application has implemented in Android Studio onto an Android mobile. Below screenshots describes the flow

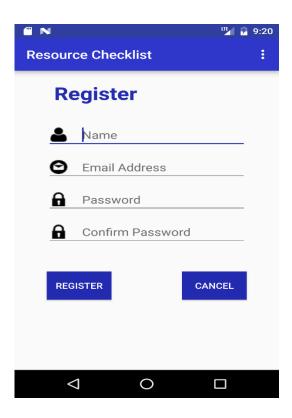
## **Login Page:**



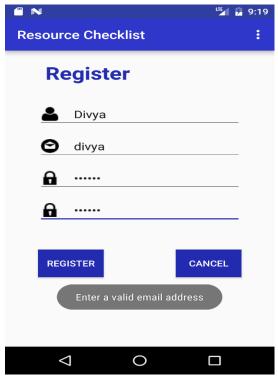
#### **Invalid Credentials:**



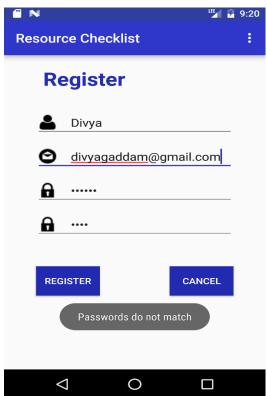
## **Registration Page:**



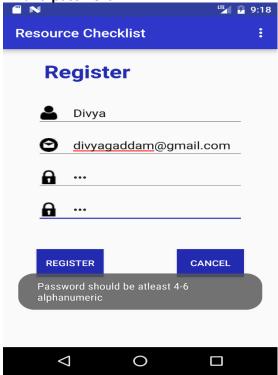
#### Invalid email-id:



#### Password mismatch:



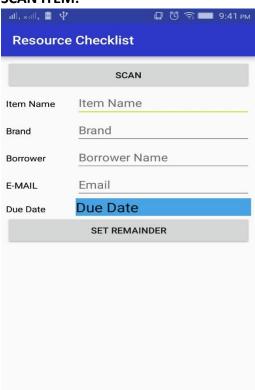
**Invalid password:** 



## **Home Page:**



#### **SCAN ITEM:**



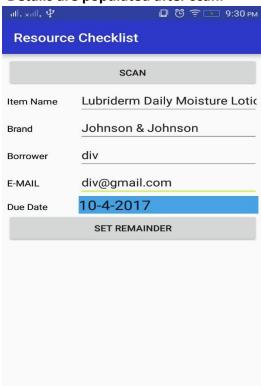
#### Scanning Item:



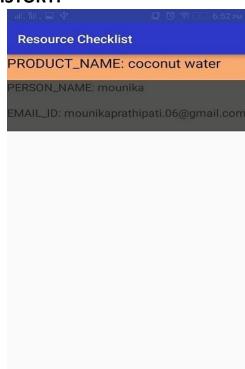
## **Calendar option for due date:**



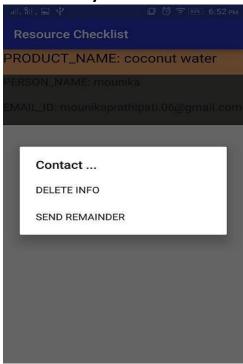
#### Details are populated after scan:



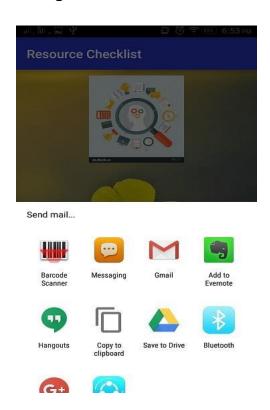
## **HISTORY:**



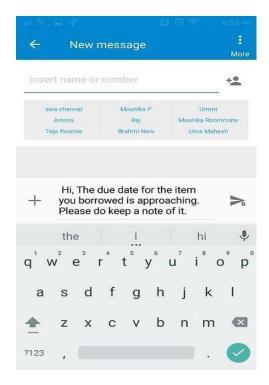
## Select an entry to send reminder:



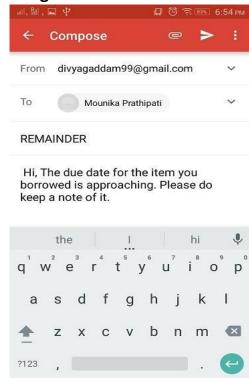
## **Sending Reminder:**



#### Sending message:



## Sending email:



#### **Deployment:**

The "Resource Checklist" application has implemented in Android Studio onto an emulator of which screenshots are provided above.

## **Project Management:**

## **Implementation status Report:**

#### **Work Completed:**

Manual entry of details

Contributor - Swathi Jasthi

Time taken - 20 hours

Contribution - 25%

Population of details automatically after Barcode scan

Contributor – Mounika Prathipati

Time taken - 20 hours

Contribution - 25%

Automatic reminder

Contributor – Divya Gaddam

Time taken - 20 hours

Contribution - 25%

UI enhancement

Contributor – Uma Maheswara Reddy Mandapati

Time taken - 20 hours

Contribution - 25%

#### Work to be completed:

Object Detection

Contributor – Uma Maheshwara Reddy Mandapati, Divya Gaddam, Mounika Prathipati

Estimated hours – 80hrs each

UI enhancement

Contributor - Swathi Jasthi

Estimated hours - 80 hours

## **Bibliography:**

https://developers.google.com/maps/documentation/javascript/get-api-key https://www.youtube.com/playlist?list=PL6gx4Cwl9DGBsvRxJJOzG4r4k zLKrnxl https://developer.android.com/training/basics/firstapp/creating-project.html https://www.udacity.com/course/android-development-for-beginners--ud837 https://www.gliffy.com/ https://creately.com/ https://github.com/KeepSafe/android-resource-remover