#### I. Introduction

This application delivers knowledge and expertise exchange between people where no real currency is involved, every member can provide service to other member to gain points in the app, and those points in turn can be used to get services from other members. Once the service is rendered, the hirer has the option of rating the employee depending upon the performance of the employee, which is one of the factors used in calculating points rate. As future developers, we wanted to develop this application which will be useful to many of the developers like us, who wanted to showcase their skills to promote themselves and be successful in their future endeavors. So, we are restricting the field of work to IT Industry.

### **II.** Project Goal and Objectives

- Overall Goal: To create a global crowd sourcing marketplace website
  which allows the potential employers to post jobs that someone can
  bid to compete for it and complete it more effectively and
  economically.
- Specific Objectives: Many people with valuable experience and multiple talents are either not working, or doing something that is not related to their knowledge and talent; so, it is necessary to have a system that utilizes every talent and/or knowledge that a person might have.

### • Specific Features:

- 1. User Registration
- 2. User Login
- 3. Provides option to Select Location
- 4. **Google Maps API**: We are integrating our application with Maps to search a hiring employee nearby, if needed to meet personally to discuss the ideas.

# 5. Select Employee

- Developer
- Manual Tester
- Automation Tester
- Team Lead

- Support Person
- 6. Cost Estimation
- 7. Provide Feedback and rating too.
- 8. Employee Registration
- 9. Updating Profile
- 10. Sending Email for Forgot Password

#### a. Push Notification API

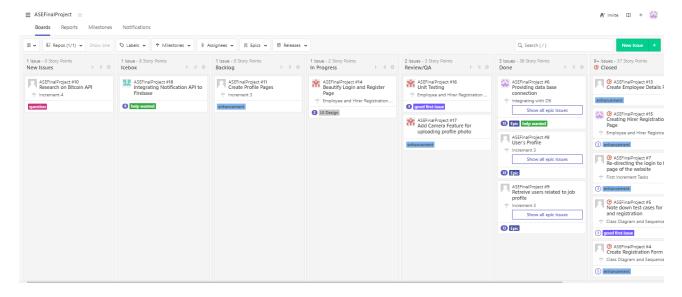
- 11. User Logout
- 12. **Bitcoin Developer API**: This API uses the block chain wallet method which is an easy method for websites to receive the bitcoin payments.

### • Significance:

- Helps to develop individual profiles as they complete more work.
- Get to know more people working in different areas of interest.
- o The employers and employees can find each other.
- Post work for site members bidding on in a competitive tender process.
- Awarding points for the work done and in turn the points can be encashed.
- We can also receive reviews and suggestions from the other peers and vice-versa.
- Initial registration fee and some free points awarded as a joining bonus.

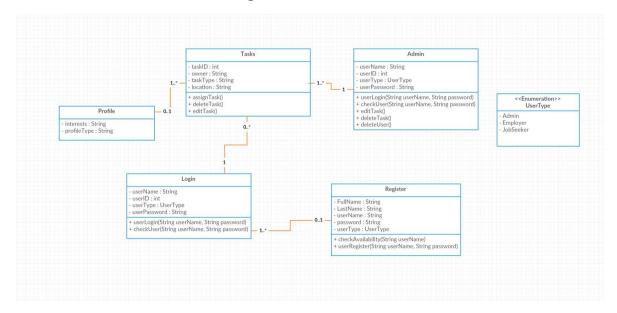
## III. Project Plan (using Zen Hub Tool)

- 1) Schedule for four different increments
  - Stories (Issues): Scenario and Use case specification



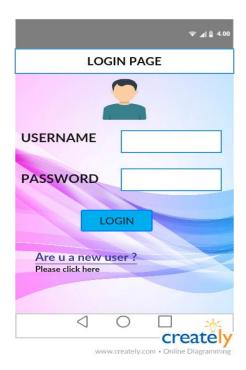
• Service Design (detailed service design, unit test design)

Below attached is the class diagram



### Wire Frames:

# **Login Page:**



# **Hirer Registration Page:**



# 3. Employee Registration Page:



# 4. Employee Registration (Experience):



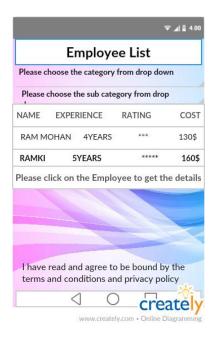
# 5. Main Page:



# **6. Sub Category Page:**



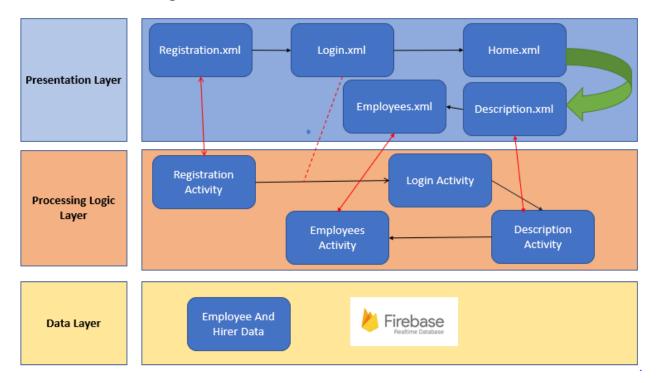
# 7. Employee Results List Page:



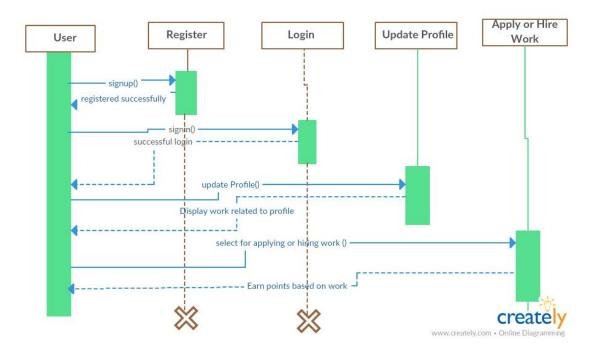
# 8. Employee Details Page:



# • Architecture Diagram



## Sequence Diagram



#### Use Cases:

- 1. **Employee Profile Registration:** This will check whether the employee has given the complete details for account registration.
- 2. **Employee Experience and Skills Registration:** This will check whether the Employee is able to give the full details for registering the account.
- 3. **Home Page:** This will check whether the hirer is able to search for the required employee or not.
- 4. **Technology Selection Page:** This will check whether the employee is available for a role is well known with the technology or not.

# • Service Implementation (Implementation and Testing)

Test Case Name	Test Case Description (After FireBase Integration)	Expected	Pass/Fail	Pass/Fail
Login	Enter both Invalid User ID and Password	Invalid Login Error message should be dispalyed	Pass	Pass
	Enter Valid UserID and Invalid Password	Invalid Login Error message should be dispalyed	Pass	Pass
	Enter Invalid User ID and Password	Invalid Login Error message should be dispalyed	Pass	Pass
	Enter both userID and password valid	Redirect to Home Page	Fail	Pass
Register	Give all the details blank	Error appears	Pass	Pass
	Enter Email ID without @	Invalid Email Id error should be displayed	Pass	Pass
	Enter different characters for password and confirm password	Error message prompting both to be same	Pass	Pass

Test Case Name	Test Case Description	Expected	Pass/Fail	Pass/Fail
	Ask to select image from phone when clicked on Change Profile Picture	Ask for options like Gallery, File Manager etc	Fail	Pass
	Select Image	Image Selected	Pass	Pass
	Display selected image after selecting image	Displaying selected image on update profile page	Pass	Pass
Update Profile	Click on Edit Profile	Direct to Edit Profile Page	Pass	Pass
	Click on Change Password	Direct to Change Password Page	Fail	Fail
	Ckick on Update Profile Button	Profile Updated	Pass	Pass
	Try Login with new Password	Logged In	Pass	Pass
Notification for Mail	When click on Forgot Password, user gets a notification to email	Receives Notification to registered mail id		
	When try to message or contact the employee, the employee gets a notification			

#### 2) Project Timelines, Members, Task Responsibility

#### • Project Timelines:

#### **Increment 1:**

**Task1:** Design a login page and sign in using Google Login.

Task2: Design a login page and sign in using Facebook Login.

Task3: Design a register page and sign up for the application.

**Task4 (Common Task):** Research on Push Notification and setting up the environment for the application.

#### **Increment 2:**

**Task1:** Create Employee Registration Page, Hirer Login Page and Employee Change Password Logic. (Vinay Jaibheem)

**Task2:** Create Profile Page for Employee and Update Profile, Hirer Change Password Logic. (Pranoop Mutha)

**Task3:** Create Hirer Registration Page, Hire Registration Success Logic, Hirer Home Page, Category and Sub Category pages. (Lakshmi Mrudula)

**Task4:** Create Technician Forgot Password, Technician Details, Technicians List Page and research on Push Notification for sending SMS to mail when clicked on Forgot Password- (Dinesh) **Task5 (Common Task):** Research on integrating Firebase with Android Studio to retrieve and save the employee and hirer records.

#### **Increment 3:**

**Task1:** Retrieving jobs related to the user profile, modifying UI. (Pranoop)

**Task2:** Integrating Google Maps API for searching employees nearby. (Dinesh)

**Task3:** Developing Users Profile and Camera Feature. (Lakshmi)

Task4: Connecting with the External DB (Vinay)

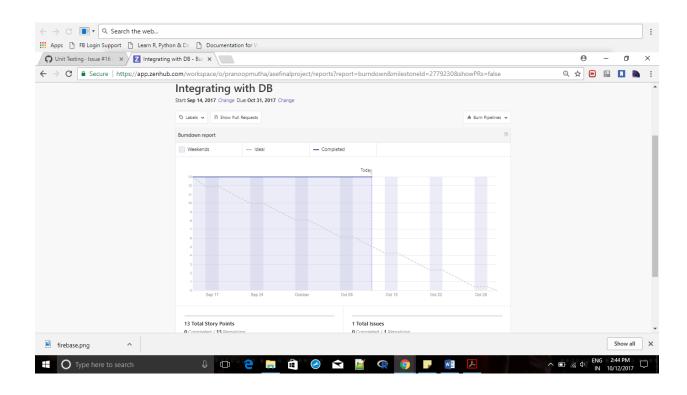
Task5 (Common Task): Research on Notification with Firebase.

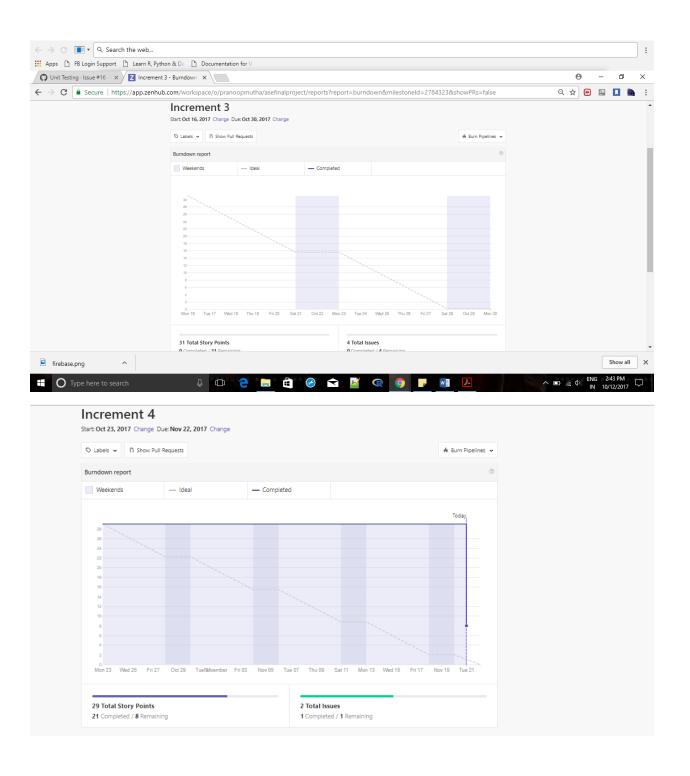
#### **Increment4:**

Task1: Integrating Bitcoin API

**Task2:** Integrating whole application and redirecting pages.

# 3) Burndown Chart





#### IV. Second Increment Report

#### Existing Services/ REST API

As of now, we are not using any REST API, we are still in the research process of connecting to external DB and we will be mostly using SQL DB to fetch the data from the external resource.

### Detail Design of Features

The key features of the project are divided into tasks for each of the team member for each increment.

Starting with the **first couple of increments**, we will be working on Login, Register and User Profile Pages and redirecting the login page to the home page using login. The User profile pages will be including all the background information of the user such as the educational background, personal details, work experience etc. In the above tasks, the login page was taken care by Vinay Jaibheem, the login with Facebook will be taken care of Lakshmi, Registration Page will be taken care of Dinesh and the profile pages will be taken care of Pranoop. The profile page also includes the integration of DB with it. In addition, the whole team will be researching on both how to integrate with DB and on the PUSH Notification and setting up the environment for application.

Moving to the **third increment**, retrieving jobs related to the user profile will be done by Pranoop. Once the user updates his skills in the profile, the jobs matching to it will be displayed. In detail, the skills will be taken as a filter for retrieving jobs that are best suited for the user. Next, Integrating Google Maps API will be taken care of Vinay Jaibheem, which helps the employer to meet the employee sometimes if in case there is a need to meet in person or he wants someone to work within their office premises. Developing users profile will be taken care of Lakshmi, which will be including features like notifications or projects list done by the user etc. and finally, connecting with external DB will be taken care of Dinesh. The whole team will be working on the research of the Bitcoin API. This is the API which is used for payment transfer in our application, which is a type of crypto currency.

Finally moving to the **fourth increment**, Pranoop and Vinay will be working on the Bitcoin API for payments mainly and the whole team will be working on the integrating and documentation, and the presentation part of the application.

Below attached is the sample sequence diagram for the application

#### Testing

At each phase of the application, the testing goes on and the whole team will be part of this throughout the process of the application.

#### Implementation

As of now, we are trying to implement the project in both web as well as mobile app, but according to the time and constraints of the team members, we may limit to web application only. We will be using HTML5, CSS3, Angular JS, JSON, SQL DB as the primary technologies and other couple of technologies or tools, if needed.

### Deployment

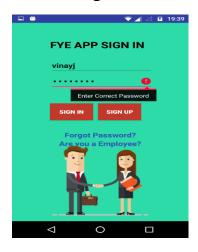
The whole project will be deployed to the GitHub for each increment for sure and whenever we are completed with the tasks within the increment. PFB the GitHub link and WIKI for our final project:

Deployment to Mobile:

### 1. Hirer Sign In:



2. Hirer Sign In Validation:



3. Hirer Register Page:



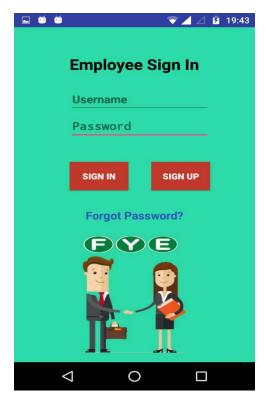
# 4. Registration Page Validations



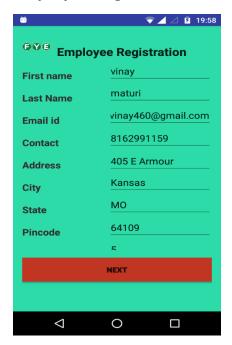




# **Employee Sign In:**



# **Employee Registration:**

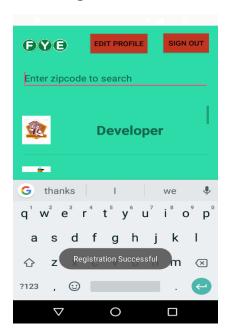




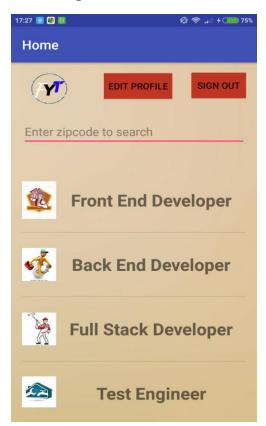
# **Employee Registration Success**



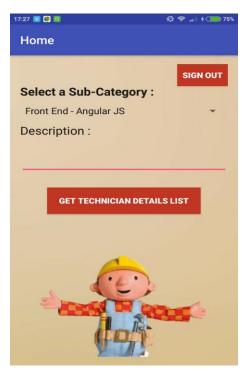
# **Hirer Registration Success:**



# Main Page:

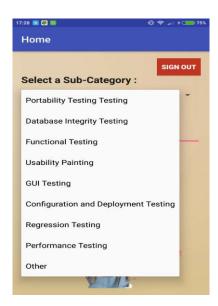


# **Sub Category Home Page:**



# **Sub Category Selection:**





#### **Edit User Profile:**



# **Select Image from Gallery or File Explorer**



# **Displaying selected Image:**



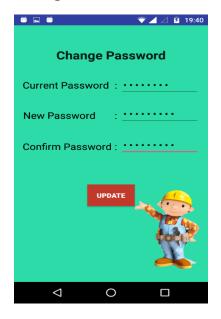
# **Forgot Password:**



**Display Employee List Based on Category and Sub Category:** 



### **Change Password:**



#### GitHub and Wiki Links

GitHub Link: <a href="https://github.com/PranoopMutha/ASEFinalProject">https://github.com/PranoopMutha/ASEFinalProject</a> Wiki Link: <a href="https://github.com/PranoopMutha/ASEFinalProject/wiki">https://github.com/PranoopMutha/ASEFinalProject</a> wiki

## • Project Management

## o Implementation Status Report

# Work Completed

Created Login Page, Registration Pages for both Employee and Hirer, Home Page, Sub Technology Page with some records from xml as temporary until data base configuration gets completed along with Architecture Diagram, wire frames and UML Diagrams

# Work to be Completed

Integrating Firebase DB with android i.e. collect data related to employee and hirer.

# • Bibliography

www.freelancer.com

www.developers.google.com

www.developers.facebook.com

www.blockchain.info/api

www.creately.com

www.developers.firebase.com