

# Hotel Automation System

**SOFTWARE ENGINEERING (IT314)**

**Group: 54**

**Reporting TA: Mahir (202011002)**

**Assigned by : Prof. JayPrakash Lalchandani**



## Project Management Document

**Version: 1**

### GROUP MEMBERS

NAME	STUDENT ID
Shreyas Sakariya	201901075
Ankit Rathod	201901108
Kishan Gajnotar	201901116
Hiten Padaliya	201901401
Deep Tank	201901410
Jenish Rathod (Team Leader)	201901435

## **1. Activity list (Estimate time for each activity. Mention probable dates.)**

### **a. Formulation of the Problem (11 days)**

- In an abstract manner, we look around many aspects of what are the major characteristics of a hotel automation system, possible causes - effects, parameters and how it interacts with users. We also read some of the published good articles which aim at what is supposed to be there in a Hotel automation system.
- There are many users of the website. A separate account for all the users is needed which is end-to-end encrypted. So, first of all, we need to design the authentication page.

#### **i) Reading relevant background information (6 days)**

- For developing the front-end part of the authentication page, we need to learn ReactJS. And for the backend part, we need to learn and know the functioning of firebase authentication

#### **Understanding and document the requirements (2 days)**

- Valid Email: The email entered by the user must be a valid email ID.
- Valid Password: The password should match the requirements set by the website.

#### **Discussions (3 days)**

- We discussed how we can manage several users to authenticate simultaneously without a system crash.
- We discussed the criteria to be set up for creating a password such that the password created by the user cannot be hacked easily.

### **b. Designing a solution, documentation (7 days )**

- Keeping our requirements in mind, we decided that for the front-end part we used ReactJS(the authentication web page) and used firebase authentication API in the backend. And we develop the initial design of the home page of the website

**c. Relevant learning (5 days )**

- By examining other repositories on GitHub, we see how other people have implemented features like the authentication process.
- By reviewing the Firebase Authentication documentation and React JS documentation, we learned which functions need to be called to complete the authentication process.

**d. Coding and unit testing (8 days)**

- Languages Used : HTML, javascript
- Frameworks Used : CSS, React JS
- Technologies used : Firebase

**e. Documentation(2 days)**

- It will be done late

**f. Testing (1 days)**

- We checked if the email validation functionality was working by testing some valid/invalid email IDs.

**g. Reviews (2 days)**

- In response to feedback from batchmates, we improved the overall design and some parts of the authentication page.

**h. Re-work and debugging (4 days)**

- It will be done later

**2. Project Plan: For each activity, your estimated start date, end date, responsible person(s).**

<b>Activity</b>	<b>Start Date</b>	<b>End Date</b>	<b>Responsible Person</b>
a) Formulation of the problem	20/03/22	31/03/22	
i. Reading relevant background information	20/03/22	26/03/22	All Members
ii. Understanding and documenting the requirements	26/03/22	28/03/22	All Members
iii. Discussions	28/03/22	31/03/22	Jenish,Shreyas
(b) Designing a solution, documentation	31/04/22	7/04/22	Jenish,Hiten, Shreyas
(c) Relevant learning	7/04/22	12/04/22	Ankit, Deep, Kishan,Jenish
(d) Coding and unit testing	12/04/22	20/04/22	All Members
(e) Documentation	21/04/22	22/04/22	Jenish,Hiten, Shreyas
(f) Testing	20/04/22	27/04/22	Ankit, Deep, Kishan
(g) Reviews	26/04/22	28/04/22	All Members
(h) Re-work and debugging	28/04/22	1/05/22	Ankit,Deep, Jenish

### 3. Testing Strategy:

Test Case ID	Test Case Objective	Test Data	Expected Result
T1	Test google OAuth, 2-step authentication	Valid Username, Aadhar Card, Mobile number, Password	System should redirect to the page where user have to enter OTP
		Enter Valid OTP	System should redirect to dashboard (Home Page)
		Invalid Details	System should ask user to enter valid Details
T2	Passwords should satisfy all the password constraints before being accepted. Password and confirm password field should have the exact same text.	1. Password of length less than 8 digits	1. Users should not be created. Error that the password should satisfy all the constraints.
		2. Password with no numeric digits	2. Users should not be created. Error that the password should satisfy all the constraints.
		3. Different values in password and confirm password fields	3. Users should not be created. Error that the passwords entered do not match
T3	Login using valid and invalid user credentials.	1. Try logging in using valid user credentials.	1. Users should be logged in and be redirected to the home page.

		2. Try logging in using invalid user credentials.	2. Users should not be logged. An error should be displayed saying 'invalid username or password'.
T4	No two users should have the same username. However, a user with the same email can create two accounts having different usernames.	1. Enter user details such that the entered username has already been used.	1. Users should now be created. Error that the entered username has already been taken.
		2. Enter user details such that the username entered is new, but the email id has been	2. Users should be created because one user can create multiple accounts with the same email and different usernames.
T5	A user should be able to upload a picture of their profile.	Try adding a profile picture via the edit profile page.	The picture should be added.
T6	Test if the user details entered are displayed correctly.	Valid user details and his/her profile picture.	The entered details should be displayed in the user profile section.
T7	User should be able to edit user details like DOB, address, name, Bio, Profile pic, etc. User should not be able to edit user details like username or email.	Go to the edit profile page and try editing the fields.	The edit should be visible on the profile page if the details entered were valid. Otherwise, the user should receive an error that invalid details have been entered and no change should be made.

T8	Test user interface of the dashboard	Rendering UI functionalities	System should be able to render all the subsections of the front end as coded.
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## Testing Schedule

Test Case ID	Estimated time (in days)	Estimated Start date and End date	Person Responsible for testing
T1	1	20/4/22	Jenish,Shreyas
T2	2	21/4/22 - 22/4/22	Jenish,Deep
T3	2	22/4/22 - 23/4/22	Hiten,Shreyas
T4	1	23/4/22 - 24/4/22	Kishan,Ankit
T5	3	24/4/22 - 25/4/22	Jenish,Deep
T6	1	25/4/22	Ankit,Deep
T7	1	26/4/22	Hiten,Ankit
T8	1	27/4/22	Kishan,Shreyas