CENG-322

Deliverable 2

The Automators

Smart Home Automation Project

By

Naveen Kumar (N01355935)

James Ricci (N00411900)

Gaganajeet Hanny (N01350705)

Sukhmanpreet Kaur (N01355022)

Contents

Brief Description of the project.

Our Project goal is to make a complete Smart home system, which consists of multiple hardware applications in one model. From our android app, the user can control and check the status of the sensors and devices. The main objective of the system is to improve the quality of life and convenience in the home. Further goals are greater security and more efficient use of energy, along with remotely-controllable devices. This product saves time by streamlining device control and also provides energy-efficient solutions. This cost-efficient system could also be adapted for commercial and industrial settings.

Member Participation

Name	Id	Signature	Effort
Naveen Kumar	N01355935	Naveen	100%
James Ricci	N00411900	James	100%
Gaganajeet Hanny	N01350705	GSingh	100%
Sukhmanpreet Kaur	N01355022	sukhman	100%

Git Hub Repo link -

https://github.com/naveenKumar5935/smartHomeAutomation.git

We created three extra branches - gagan, sukhman and layout design. All three make changes on their respective branches and changes are confirmed by naveen and james to merge with master branch.

Screenshot - Git invitation

(We asked Ali Maki but he didn't provide the git id)

Manage access

Invite a collaborator

☐ Select all   Type ▾

🔍 Find a collaborator...

☐ **gaganajeetHanny0705**
gaganajeetHanny0705 · Collaborator   🗑

☐ **Hak11**
haki11 · Collaborator   🗑

☐ **JamesRicci1900**
Collaborator   🗑

☐ **sukhmankaur5022**
Collaborator   🗑

Get team access controls and discussions for your contributors in an organization.
(NEW) Private repos and unlimited members are free.   Create an organization

Dashboard for story and tasks

General Screen Design

Subtitles	Status	Priority	Timeline	Hours Spent
Screen Designs Edit	Done	High	✓ Sep 29 - Oct 12	

Subitems	Person	Status	Timeline	
Landing fragment	James	Done	Sep 29 - Oct 1	
Splash screen	Gaganajeet	Done	Oct 1 - 3	
Kitchen Fragement	James	Done	Oct 1 - 3	
Landscape Views	Gaganajeet	Done	Oct 1 - 6	
Bedroom Fragment	James	Done	Oct 3 - 5	
Living room fragment	James	Done	Oct 5 - 7	
Menu items	Sukhman	Done	Oct 5 - 7	
Button Styling	James	Done	Oct 7 - 9	
Background Styling	James	Done	Oct 9 - 12	
Login activity	Naveen	Done	Oct 1 - 4	
Registration Activity	Naveen	Done	Oct 1 - 3	
Images and icons	Sukhman, Gaganaj...	Done	Oct 3 - 7	
Setting fragment	Naveen	Done	Oct 1 - 6	
+ Add Subitem				

+ Add

		Sep 29 - Oct 12	0

Login Security

Subtitles	Status	Priority	Timeline	Hours Spent
Login Security	Planned	High	Nov 30	

Subitems	Person	Status	Timeline	
Grab the hashed Password from the d...		Future Step	-	
Grab the salted key from the database		Future Step	-	
Get the password from the user		Future Step	-	
Hashed the salted password		Future Step	-	
Compare the two		Future Step	-	
+ Add Subitem				

+ Add

		Nov 30	0 sum

View Status of Sensors

Subtitles	Status	Priority	Timeline	Hours Spent

View Status of Sensors

	Subtitles	Status	Priority	Timeline	Hours Spent	
View Status of Sensors		Planned	High	Nov 22		

Subitems	Person	Status	Timeline	
Sensors designs status for all screens	James	Done	Oct 3 - 12	
Obtaining list of data		Future Step	-	
Display the data		Working on It	-	
Weekly reports		Future Step	-	
Detecting issues		Future Step	-	
+ Add Subitem				

+ Add

		Nov 22	0 sum

		Nov 22	0 sum

Provided Control for devices

	Subtitles	Status	Priority	Timeline	Hours Spent	
Provided Control for devices		Planned	High	Dec 1		

Subitems	Person	Status	Timeline	
Lights on/off		Future Step	-	
Turning sensors on/off		Future Step	-	
Renaming device names		Future Step	-	
Setting temperature		Future Step	-	
Adding RFID/ Access Control		Future Step	-	
+ Add Subitem				

+ Add

		Dec 1	0 sum

Trigger Notifications

Subitems		Person	Status	Timeline	
Smoke alarm notification	⊕		Future Step	-	
Overheating notification	⊕		Future Step	-	
Motion sensor notification	⊕		Future Step	-	
Unknown RFID scanned	⊕		Future Step	-	
Door status	⊕		Future Step	-	
+ Add Subitem					

App Settings

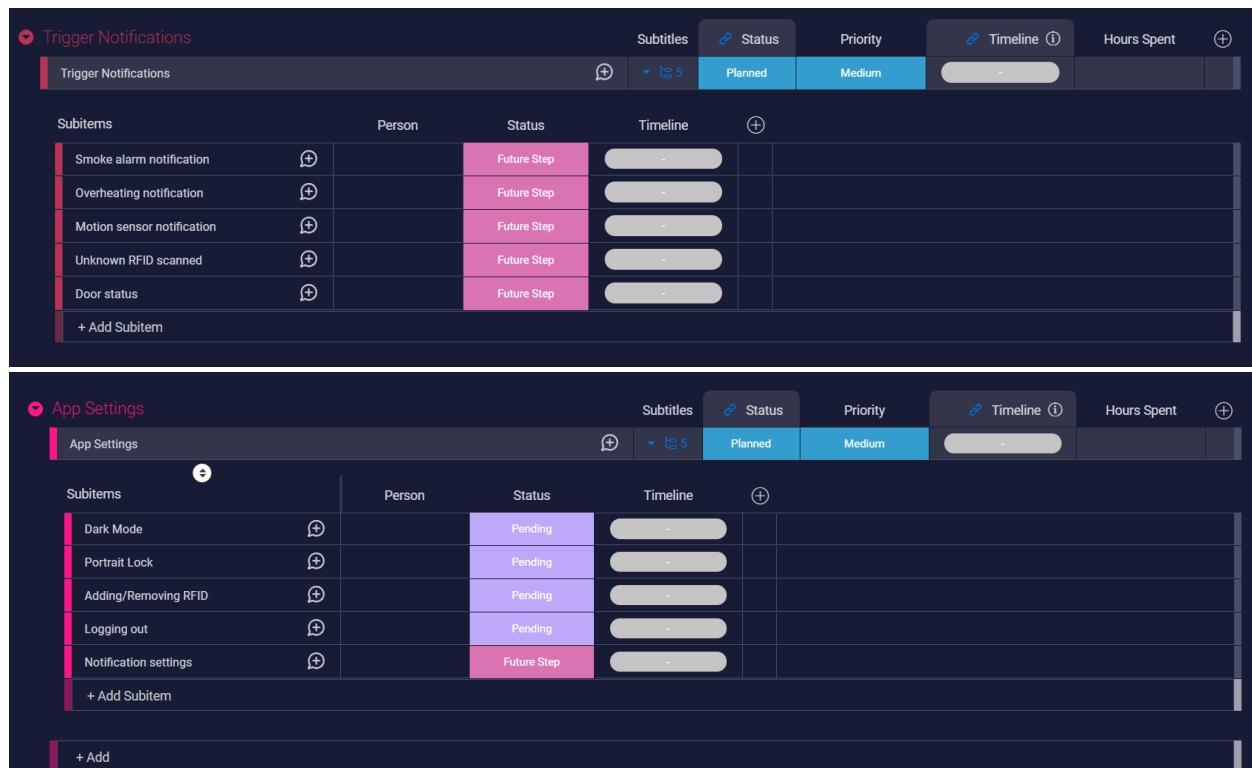| Subitems		Person	Status	Timeline	
Dark Mode	⊕		Pending	-	
Portrait Lock	⊕		Pending	-	
Adding/Removing RFID	⊕		Pending	-	
Logging out	⊕		Pending	-	
Notification settings	⊕		Future Step	-	
+ Add Subitem					

+ Add

Definition of Done

Story - General Screen Design

Tasks - Completed

- Designed all the screens, icons, images, styles, fonts
- As per deliverable 2 all requirements were fulfilled
- Updated monday.com to confirm the task completion
- Project builds without errors
- Features are tested on different sizes of screens
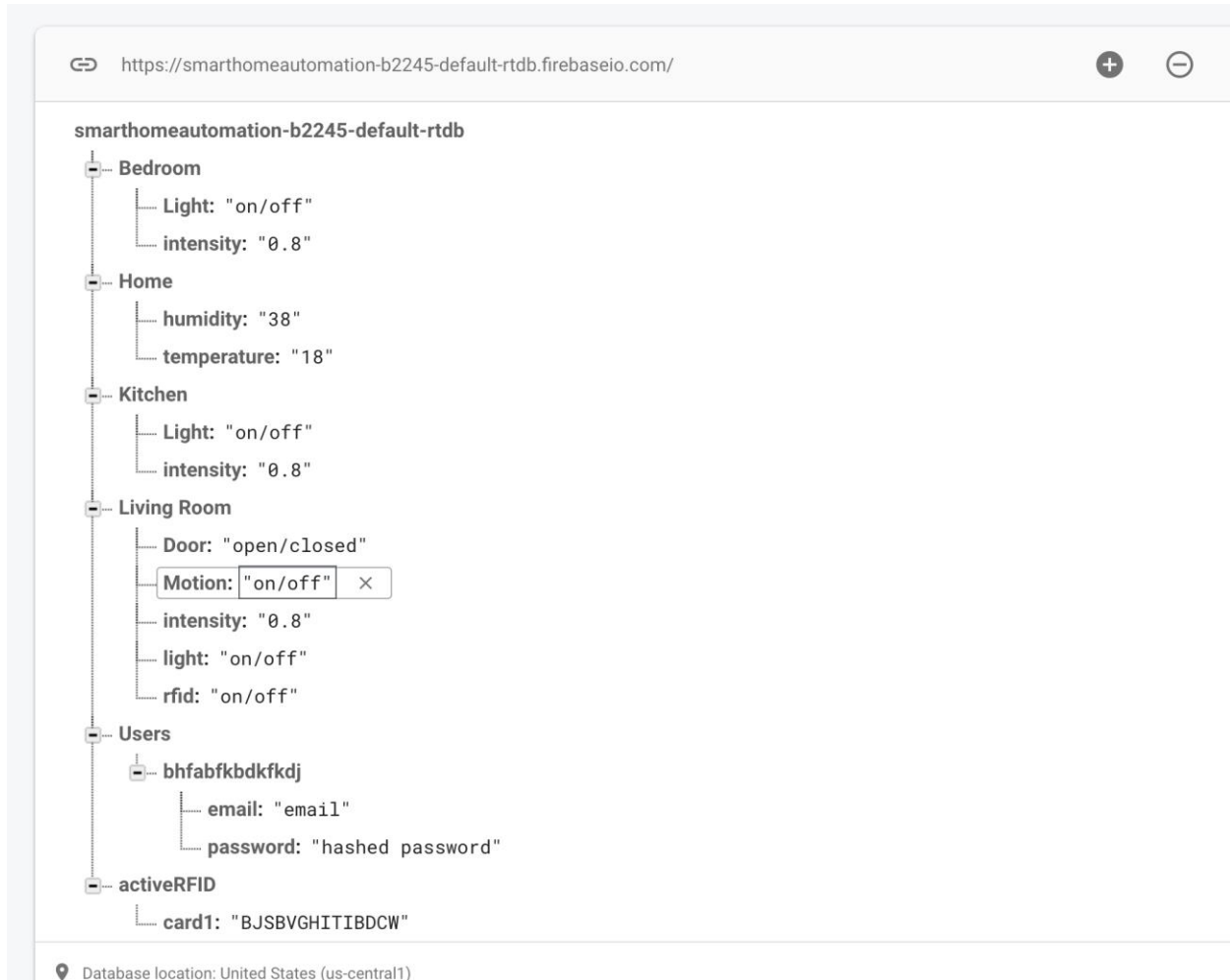- Documentation updated
- Teammates code reviewed

Business Model Canvas

Business Model Canvas

			Designed for:	Designed by:	Date:	Version:
			Smart Home Automation	S.H.A. Team	10/12/21	1

Key Partners

- Technology Partners
- Investors
- Humber College
- Home Builders

Key Activities

- Competitive pricing
- Providing more customizable options to the user
- 24*7 technical support

Key Resources

- App for users
- Access to network/Firebase
- Engineers to maintain backend systems and code

Value Propositions

- Ease of use
- Home security
- Weekly status reports
- New tech
- All in one design
- Notification of safety issues like heat or smoke
- Control of lights, even when not home

Customer Relationships

- Support through email
- mainly self serve

Channels

- Google play store with high ratings
- Word of mouth
- Social media

Customer Segments

- Homeowners
- Small business owners
- People who want control of their home/office devices like lights and sensors
- People with disabilities

Cost Structure

- Platform maintenance
- Hardware
- Installation
- R&D
- Marketing

Revenue Streams

- Hardware system
- Future ad space in app
- Installation charges
- Repairing faulty hardware such as sensors

Database Created Screen Shot

(Firebase)

Coding work progress since deliverable 1. What additional features/functionality added since deliverable 1.

In deliverable 1 we implemented the activity and fragments with proper names and locations. The back key and display alert dialog code were also added. In deliverable 2, we designed the configuration screen and included some features. Splash screen with code to appear for 3 seconds. Implemented login and register activity code to move directly to landing page. Landing page now routes to proper fragments on click. On the setting fragment, runtime permission is added to access photos and media to change the profile pic of the user. Furthermore, snackbar for

runtime permission granted or denied. Switches now show visual indicator of state of control for lights and door.

Daily stand-ups

2021-09-30 Thursday at 2:20 pm

Selected meeting days and time

- · Sunday 8:00 pm

- · Monday 3:00 pm

- · Tuesday 11:30 am (in-person)

- Discussed the deliverable 2 and start working on it by splitting work

- Read feedback of deliverable 1 and discussed the mistakes.

James: Landing, Bedroom, Kitchen, Living Room

Naveen: Setting Screen

Gaganajeet: Splash Screen

Sukhman: Stories, tasks and Monday.com

2021-10-03 Sunday – 8:30 pm

- Landing page instead of Home page

- Dark mode

- Discussed what we have finished and assigned work for next meeting

- Login screen should be done ASAP

- Have to complete the missing things from deliverable1

- Ali Maki github id

James: Landing, Bedroom, Kitchen, Living Room

Naveen: Runtime, Settings

Gagan: Images, Tab icons

Sukhman: English and French, Menu tab and overflow items

2021-10-04 Monday- 3:00pm

- Discussed the stories

- Yellow means done

- Green - Naveen

- Red - Gagan

- Blue - Sukhman

- Purple – James

- Orange – how so ever will not have 5 commits

2021-10-10 Sunday – 8:02 pm

- Went through the deliverable to check all the steps are completed

- Discussed the time for next meeting

- Make sure that everyone is on right track

2021-10-12 Tuesday 12:30 pm

- Discussed what is left and what needs to be changed as per the requirements.

- Discussed DOD and business canvas model.

- Completed Business canvas model during the meeting.