



MINISTRY FOR EDUCATION AND SCIENCE OF RUSSIA

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SAINT PETERSBURG ELECTROTECHNICAL UNIVERSITY

«LETI»

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Application for Delivery E-bill

PROJECT REPORT

Naveen

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Electronic & Paper

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# 1. Project Subject and Description

*Development is carried out on the basis of the requirements for the course work in the discipline "Software Engineering".*

*Full name of the project : "Application for Delivery E-bill"*

*Short name of the program (nick-name, 4-5 characters) \_\_\_\_\_ E-bill*

*In this project we developed an android application for the Delivery boy.*

*Using this application delivery boy first do registration, after the Registration Delivery boy will get an email with confirmation of the account. When Delivery boy confirm the account using email after that he can log in.*

*After Login Delivery boy will get E-bill of the ordered items with Name, contact no and Address.*

*After the delivery, delivery boy click on the Delivered button and in our database we shall get the confirmation of the Delivery with customer Name and contact number.*

*The software product is intended to development of android application for the Delivery E-bill. Using this application Delivery boy will not need any bill slip on paper .So we can save our tree as we know papers are prepared with trees.*

## 2. RESULTS OF THE PROJECT

Delivery boy Registration:

16:26 0.2KB/s 63

**E-bill**

# Registration Form

Naveen

9988889900

Naveensheor0@gmail.com

.....

**Register**

User registered

For Registration User will Provide:-

Name

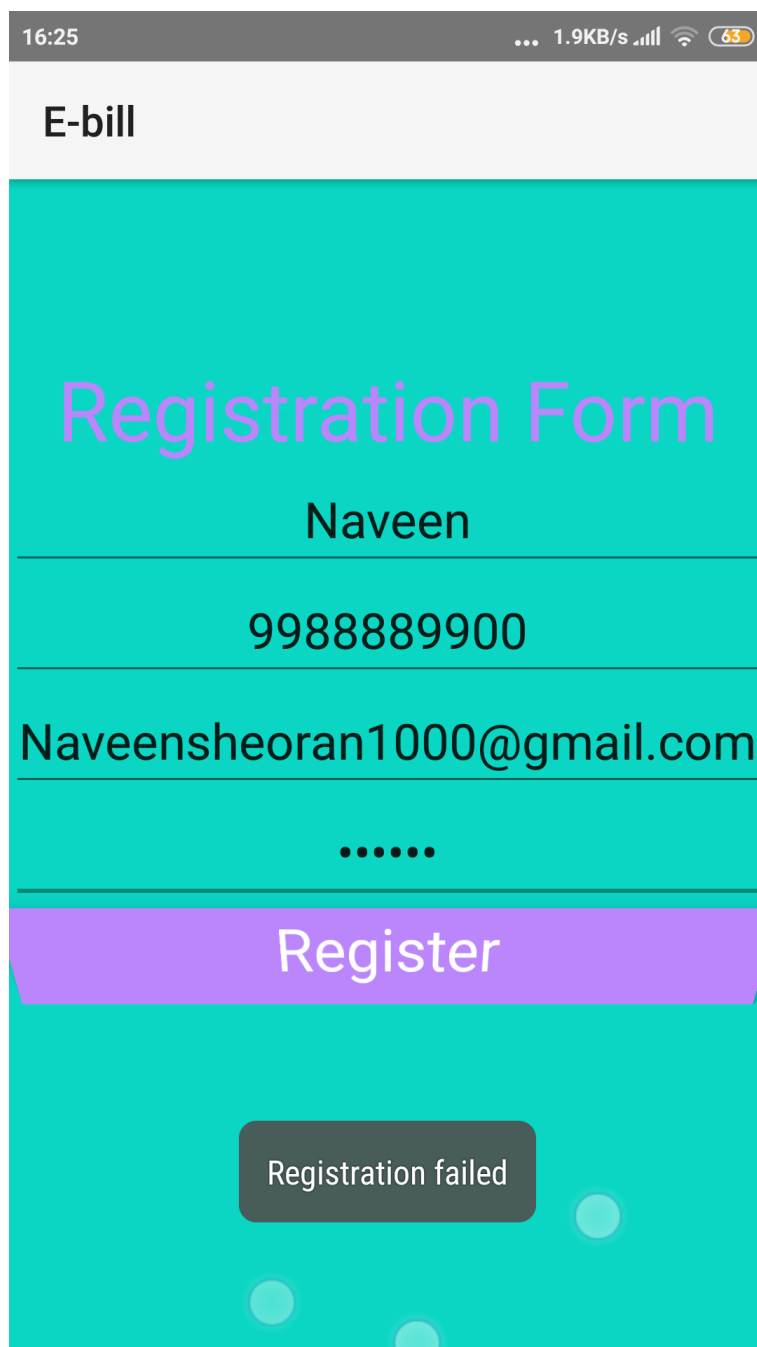
Mobile number

Email id

Password

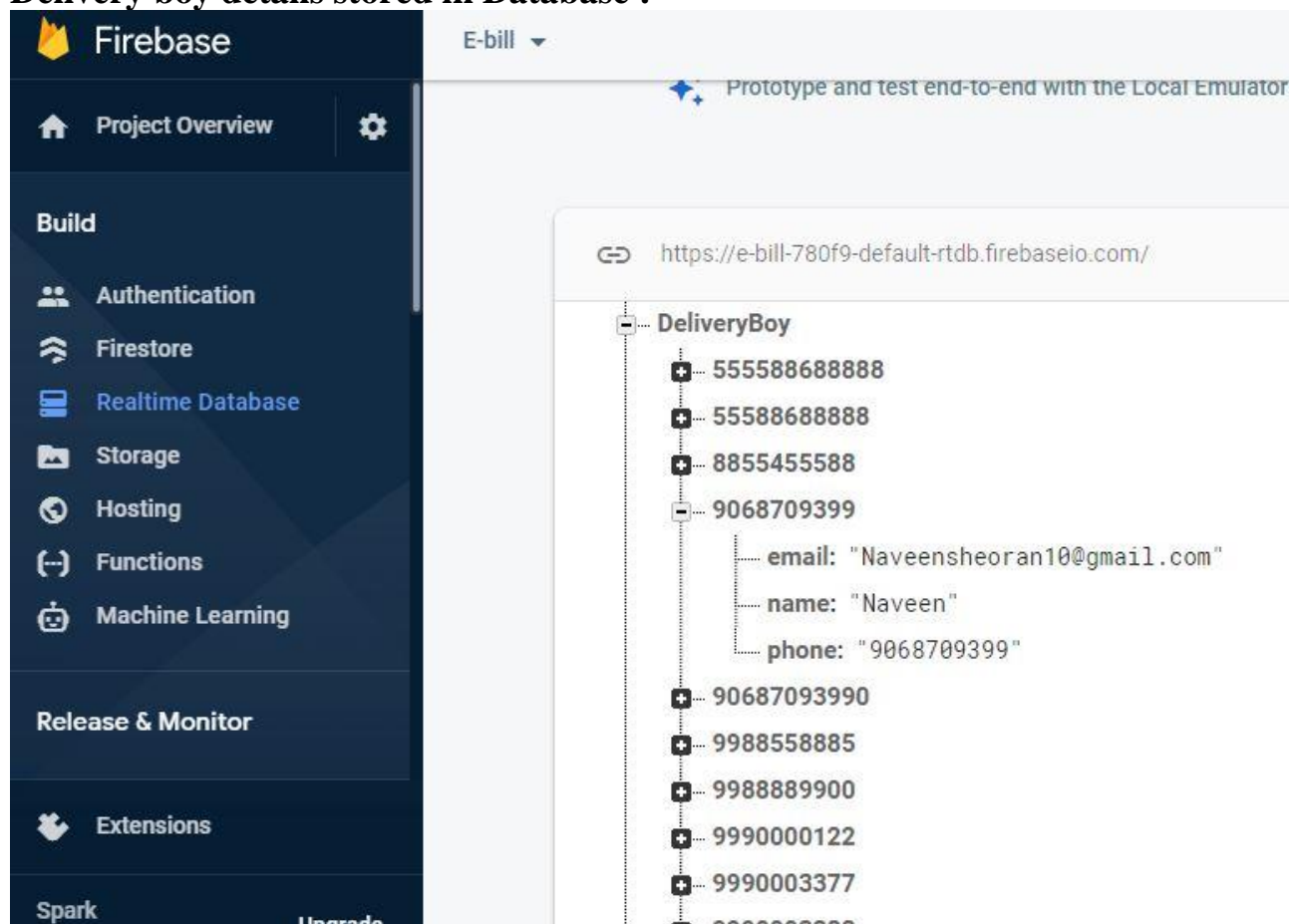
After successfully registration all user data stored in Firebase Database

If User already Registered :



The screenshot shows a mobile application interface for an 'E-bill' system. At the top, the status bar displays the time 16:25, a data speed of 1.9KB/s, and a battery level of 63%. Below the status bar is a header with the text 'E-bill'. The main content area has a teal background and features a 'Registration Form' in large pink letters. The form includes several input fields: a name field with 'Naveen', a phone number field with '9988889900', an email field with 'Naveensheoran1000@gmail.com', and a password field with five dots. A purple 'Register' button is positioned below the password field. At the bottom of the screen, a dark grey toast message box displays the text 'Registration failed'.

## Delivery boy details stored in Database :-

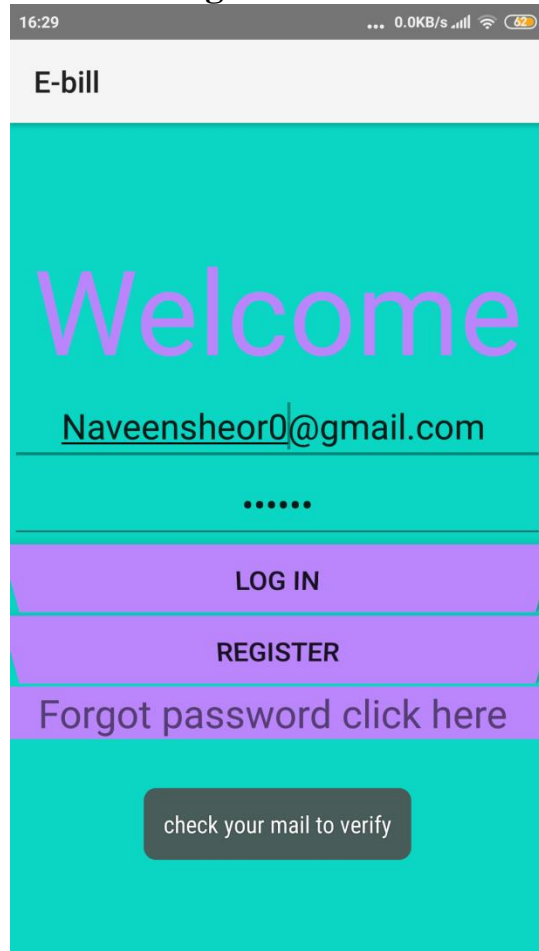


The screenshot shows the Firebase console interface. On the left is a dark blue sidebar with the 'Firebase' logo and a menu. The menu includes 'Project Overview', 'Build' (with sub-items: Authentication, Firestore, Realtime Database, Storage, Hosting, Functions, Machine Learning), 'Release & Monitor', 'Extensions', and 'Spark'. The main area on the right is titled 'E-bill' and shows the URL 'https://e-bill-780f9-default-rtdb.firebaseio.com/'. Below the URL, a tree view shows a node named 'DeliveryBoy' expanded, revealing a list of phone numbers. One phone number, '9068709399', is selected and expanded to show a JSON object with the following details:

- email: "Naveensheoran10@gmail.com"
- name: "Naveen"
- phone: "9068709399"

Other phone numbers visible in the list include 555588688888, 55588688888, 8855455588, 9068709399, 90687093990, 9988558885, 9988889900, 9990000122, and 9990003377.

## First time log in:



## Email authentication:

Verify your email for project-834025028227  Inbox x



noreply@e-bill-780f9.firebaseio.com

to me ▾

7:10 PM (0 min)

Hello,

Follow this link to verify your email address.

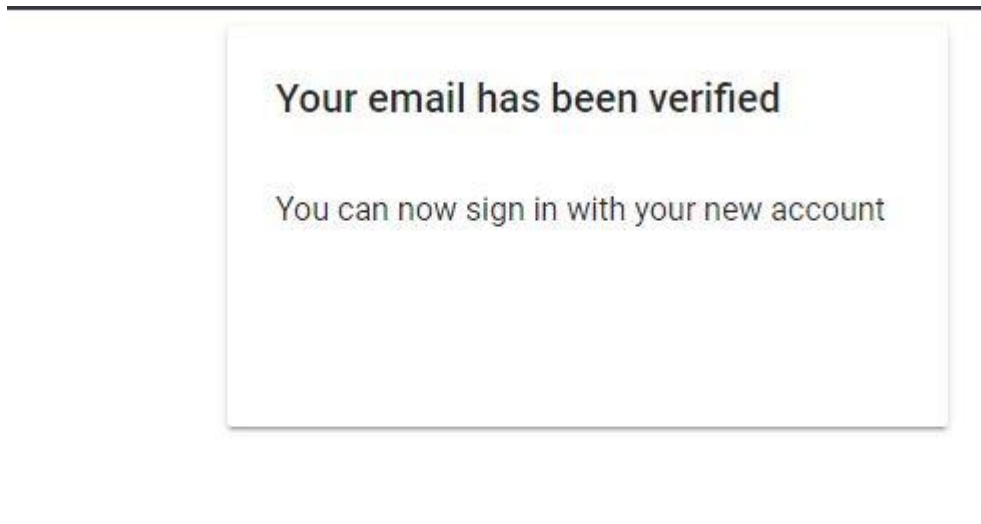
[https://e-bill-780f9.firebaseio.com/\\_/auth/action?mode=verifyEmail&oobCode=xG0v6opufhMVQSF\\_ZimSg6Y2htMyFKNtP3rCW7nouFsAAAF5QnHa-g&apiKey=AlzaSyCHNSjDbxwcu9boa8Qo6qjjKB56-SHbgF0&lang=en](https://e-bill-780f9.firebaseio.com/_/auth/action?mode=verifyEmail&oobCode=xG0v6opufhMVQSF_ZimSg6Y2htMyFKNtP3rCW7nouFsAAAF5QnHa-g&apiKey=AlzaSyCHNSjDbxwcu9boa8Qo6qjjKB56-SHbgF0&lang=en)

If you didn't ask to verify this address, you can ignore this email.

Thanks,

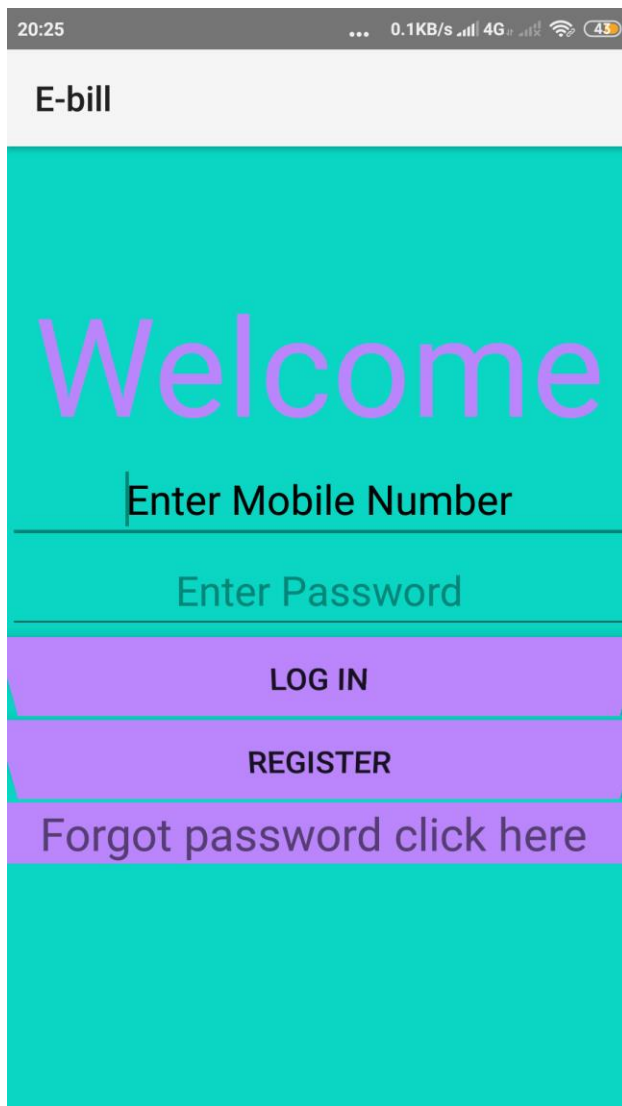
Your project-834025028227 team

### After Email verified:



### If forgot password:

#### Click on the forgot password link:

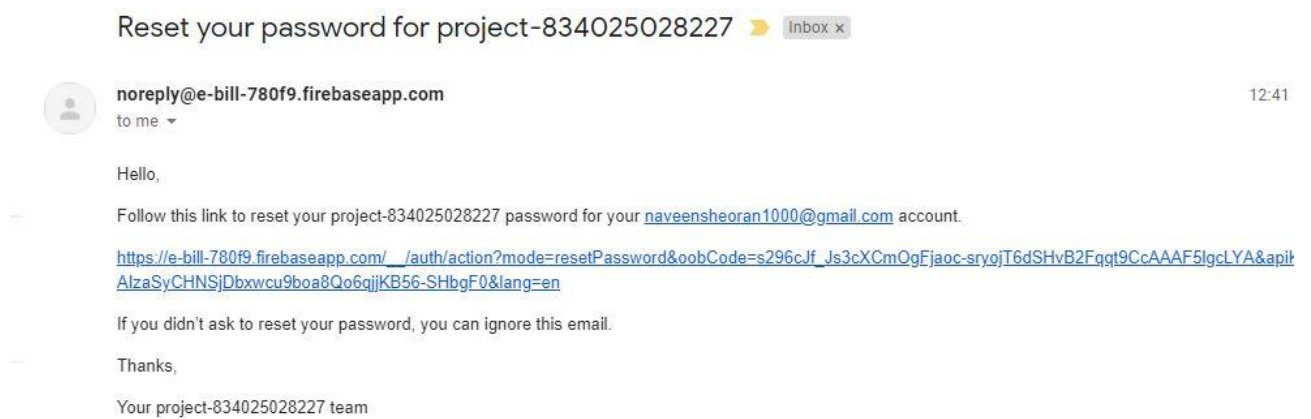




After click on forgot password link new activity will open:



## Reset password email



## Reset your password

for **naveensheoran1000@gmail.com**

New password



SAVE

## Password changed

You can now sign in with your new password

## LOG IN CREDENTIALS CHECKING:

16:23 0.0KB/s 63% 16:23 2.4KB/s 63%

E-bill E-bill

# Welcome Welcome

Naveensheora Naveensheoran1000@gmail.com

error password length please enter valid email id

LOG IN LOG IN

REGISTER REGISTER

Forgot password click here Forgot password click here

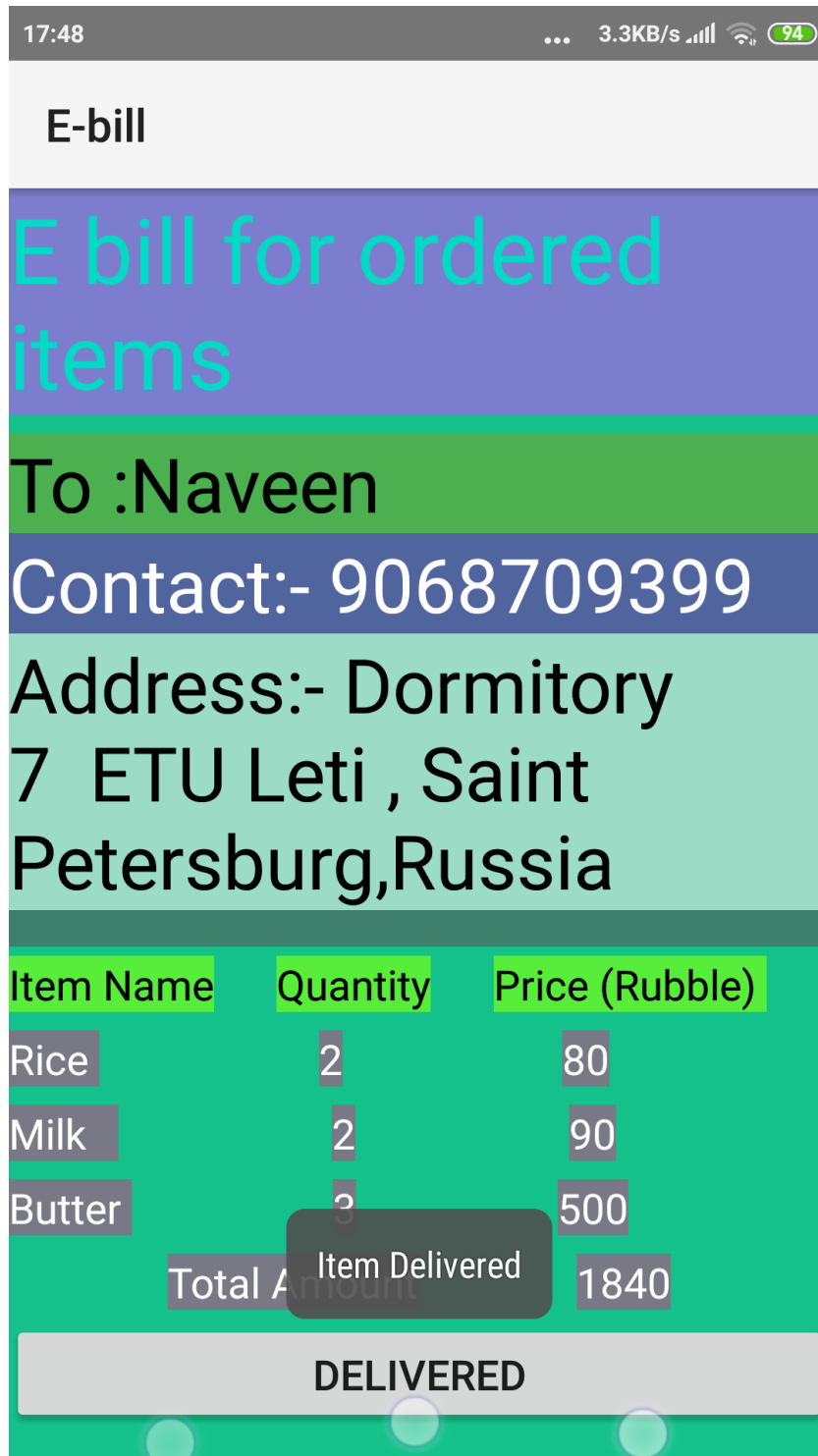
**After Successful log in:**

The screenshot shows a mobile application interface for an E-bill. At the top, the status bar displays the time 17:48, a speed of 0.0KB/s, and a battery level of 94%. The app header is titled "E-bill". Below this, a large purple banner reads "E bill for ordered items". The recipient's name "To :Naveen" is shown in a green bar, followed by the contact number "Contact:- 9068709399" in a blue bar. The address "Address:- Dormitory 7 ETU Leti , Saint Petersburg,Russia" is displayed in a light blue bar. A table with a green background lists the ordered items: Rice (2 units, 80 Rubble), Milk (2 units, 90 Rubble), and Butter (3 units, 500 Rubble). The total amount is 1840 Rubble. At the bottom, a grey button labeled "DELIVERED" is visible.


Item Name	Quantity	Price (Rubble)
Rice	2	80
Milk	2	90
Butter	3	500
Total Amount		1840

**DELIVERED**

***Delivery Confirmation on Click the DELIVERED BUTTON:***



## CONFIRMATION IN DATABASE:

 <https://e-bill-780f9-default-rtdb.firebaseio.com/>

e-bill-780f9-default-rtdb



Delivery

"Contact:- 9068709399 ": "To :Naveen

## Key milstones :-

Table 1. Key milestones

№	Start date /	End date	Description
1	05.02.21	03.03.21	SOW developed, reviewed and signed
2	03.03.21	18.03.21	Project Management Plan(PMP)
3	18.03.21	22.04.21	Project Implementation – Phase 1
	31.03.21	14.04.21	Authentication ,Registration
	14.04.21	22.04.21	Real time Database
4	22.04.21	26.05.21	Project Implementation – Phase 2
	23.04.21	07.05.21	Forgot password ,new Design
	07.05.21	26.05.21	Getting bill format , Delivery confirmation
5	26.05.21	02.06.21	Course project completed, presentation and final report prepared for defense

#### ACTUAL DATES OF PROJECT IMPLEMENTATION

	Actual
<Task/Milestone>	DD-MM-YYYY
Kick of Meeting	27-02-21
SOW	27-02-21
PMP	24-03-21
Authentication Registration	14-04-21
Real time Database	22-04-21
Email Verification	06-05-21
Bill Format	14-05-21
Delivery Confirmation	21-05-21

#### Configuration and change management :-

Version control system:-

For our project we used Github to store the code and other documents.

“ link <https://github.com/naveenpardeep/Delivery-boy-e-bill> “

## FINAL PROJECT METRICS:

Reference : T04\_E-Bill\_Product\_Metrics\_2021

Link “ [https://github.com/naveenpardeep/Delivery-boy-e-bill/blob/main/Files%20Doc/T04\\_E-Bill\\_Product\\_Metrics\\_2021.xls](https://github.com/naveenpardeep/Delivery-boy-e-bill/blob/main/Files%20Doc/T04_E-Bill_Product_Metrics_2021.xls) ”

### Project risks

Our team created a risk register with following details:-

#### Risk Register

Project name: Common project risks

ID	Date raised	Risk description	Likelihood of the risk occurring	Impact if the risk occurs	Severity <i>Rating based on impact &amp; likelihood.</i>	Owner <i>Person who will manage the risk.</i>	Mitigating action <i>Actions to mitigate the risk e.g. reduce the likelihood.</i>
1	[enter date]	Project purpose and need is not well-defined.	Medium	High	High	Project Sponsor	Complete a business case if not already provided and ensure purpose is well defined on Project Charter and PID.
2	[enter date]	Project design and deliverable definition is incomplete.	Low	High	High	Project Sponsor	Define the scope in detail via design workshops with input from subject matter experts.
3	[enter date]	Project schedule is not clearly defined or understood	Low	Medium	Medium	Project Manager	Hold scheduling workshops with the project team so they understand the plan and likelihood fo missed tasks is reduced.



## **Personal results:**

**Naveen:-**

**Coding in java**

**XML design**

**Email verification**

**Userlogin method**

**Checked correct mail id format , mobile etc**

**Authentication**

**E-bill**

**Delivery Confirmation**

**Chubchik Alexander:-**

**Usability testing**

**Functional testing**

**Debug reports**

**Password change method**

## 6. Lessons learned:-

During this project we learned a lots of new technologies in the field of Software engineering subject and in android development.

In the Software engineering subject we learned how to work in team which is most important part while working in any IT company.

We learned how to manage the work within deadline. Most important learned lesson was the test plans and coordination of the team members in the project.

Worked in a proper manner, with Key Milestones, and communications with the project team, Traced the progress of the project.

In software engineering lab sessions we learned how we can detect the faces of object using machine learning like cat and dog.

In this project we learned different new credential checking of the user's input data.

Authentication of the user's details, Learned new java coding with Firebase.

Like how we can store the data in the Firebase Database in real time. We Learned how we can retrieve the data from the Firebase database using the android coding in Java.

We learned different style of XML design .Like how we can design the user interface with the different Layout , Linear Layout , Relative Layout and many others.

Different testing techniques for debugging the android application.

During the project we learned that how we can store the project codes and files on Github with all team members. Using Github how to send pull request and commit the request.

Using this we can access our project's details anywhere and without loss of the data if any team member's System crashed or any fault then team member can access stored data on Github.

## Summary

During the Software Engineering classes we developed android application for the Delivery Boy . In future we want to add some more functionality in this application like real time tracking of the Delivery boy. We want to add some more function like Customers also can use the same application for the order of food items .

## Acknowledgement

I would like to express my deepest appreciation to all those who provided me the possibility to complete this report. I wish to express my sincere gratitude to my supervisor **Dr. Evgeny Philippov**, for his patience, interest, insightful comments, practical advice and unceasing ideas that have always helped me enormously in my project and writing of this project report. Without his support and guidance, this project would not have been possible. I could not have imagined having a better supervisor in my study.