

LAMBTON COLLEGE

TECH TEAM

MAD 5274 PROJECT PRESENTATION DOCUMENT

CORONA SAFE



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Table 1: TEAM MEMBERS

Team name: TECH TEAM

Team Members

- RAJWINDER KAUR C0764948
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ABSTRACT

In the third semester of our program we have a course of developing a Capstone II project. We have to choose a topic which can solve a real-life problem and develop an application out of it. So, the topic we have chosen is Corona Safe an app which provide all the latest information about corona and screening tool option to check whether you are affected by COVID-19 or not. This capstone II project is an application that enables the public to know whether they are positive or negative for the Corona virus. This capstone project is the part of the Mobile Application Design and Development course in third semester at Lambton College. This application was created by Sanjeev Gupta and Rajwinder Kaur and is referred to as “Corona Safe”. Currently, there are a few applications in the market such as “Corona, CA” and “Test Yourself Puducherry”. However, these applications do not provide the latest news about the Corona virus as well as an easy format to follow for children and adults. This indicates the need for this application in the market and the challenge this application brings. This is the specification report which include all the information of the project. This report explains the idea of the project, what are the requirement will be full filled and technical requirements with clear diagram and also explained the API which will be used to create the project. This also consist the Mock-up which por- trays the basic idea of project and how much time we will work on each task and how to and when we will finish it, this information is clearly explained in the Giant Chart.

1.The Vision and Concept our Project

The name of our application is “CoronaSafe”. It’s an android application that gives people knowledge about the probability of them testing positive for the Corona virus. Nowadays, it is essential for the public to have an application that is easy to use and updates them on latest news of Corona virus. Thus, this application provides users a wide range of functionalities that help users understand the COVID-19 pandemic situation.

These functionalities enable a user to easily create an account by using Google and Facebook. The public is also allowed to buy medical equipment through the app such as masks and gloves.

0.1 FEATURES OF OUR APP

In this section, you must explain what features you will build for your app.

1. SCREENING TOOL: user can test himself whether the person is suffering from corona virus through some series of ques(on and in the end it show the result depends on the answer selected by user.
2. GLOBAL STAT: Allows the public to know the total global data. For example, the total cases, total death, Active cases through figures, charts and data
3. LATEST FEED: It shows latest news and updates regarding health and medical stats of the Corona virus.
4. MEDICAL SHOP: Provides the user the ability to purchase medical products (medicine, mask, sani-tizer
5. ADD CARD: here user can add payment method to buy medical resources
6. ADD ADDRESS: user can add delivery address
7. ORDER HISTORY: this show the product list that user buy through this app
8. LOGOUT: this button used to logout from application and also clear the session of user identification of the tasks to be accomplished

0.2 OBJECTIVES OF OUR APP:

1. Person can login and register.
2. Firebase authentication use for the app login
3. latest feeds section on COVID-19
4. 3D world which show corona effect world wide
5. google and Facebook sign in.
6. user can test himself or for someone else wether the person is suffering from coronavirus or not with the help of COVID-19 Screening Tool
7. Direct emergency call functionality.
8. user can buy medicine , mask and sensitizer from app for revenue generation.

0.3 TECHNOLOGY TO BE USED:

Platform: Android

Reasons of using Native Application

1. Very fast
2. Built to run on specific platform
3. Distributed in Play stores.
4. Interactive and intuitive
5. Interact with device utilities.
 - Language: JAVA
 - Database: Firebase

0.4 PHASES OF OUR APPLICATION

1. SPECIFICATION PHASE

In the specification phase, the features that will be there application are:

- Every user can create separate account.
- Firebase authentication use for Secure login
- Easy login by google and Facebook sign in.
- User can test himself whether the person is suffering from corona virus or not with the help of COVID-19 Screening Tool
- 3D world which show corona effect worldwide
- latest feeds section on COVID-19.
- user can buy medicine, mask and sensitizer from app for revenue generation.

2. REALIZATION PHASE

While creating this application, we have implemented all the features mentioned above. However, as we were developing this application, we noticed we have 2 more functionalities that we did not include in the specification phase. These include the payment method and the delivery address to complete the medical shopping section. We implemented this functionality while completing this project to ensure the application ran smoothly.

0.5 The context of study

In the third semester of our program we have a course of developing a Capstone project. We have to choose a topic which can solve a real-life problem and develop an application out of it. So, the topic we have chosen is the recent pandemic of the Corona Virus

1. MOTIVATION TO CHOOSE THIS TOPIC: We are currently experiencing a pandemic that is negatively affecting the health of many people across the world. There are many countries who do not have access to the correct information, resources, and news about the virus. Due to this, the public is not aware about the severity of the situation.

Thus, the focus for the application is to provide the public with the resources they need to tackle the Corona virus situation and to inform them about the latest updates. This will ensure the world is on the same page about the pandemic.

2. PROBLEM SOLVED BY OUR APP: This app will provide a way for all the people in the world to stay updated on the Corona virus pandemic, provide medical resources to the public in an easy functional way and test themselves for the virus. This app will help medical officials to tackle the virus in an effective way.

3. DEFINING AND ANALYZING THE PROBLEM

- Animation: we used Complex animation for the first time in our app. Thus, it took a while
- New to fire base fire store: we used different fire base services before not fire store so that's another difficulty we faced
- Difficulty in finding free API's: we need an API for words in our application, but we are finding it difficult to find a free API.

2.Work Breakdown Structure

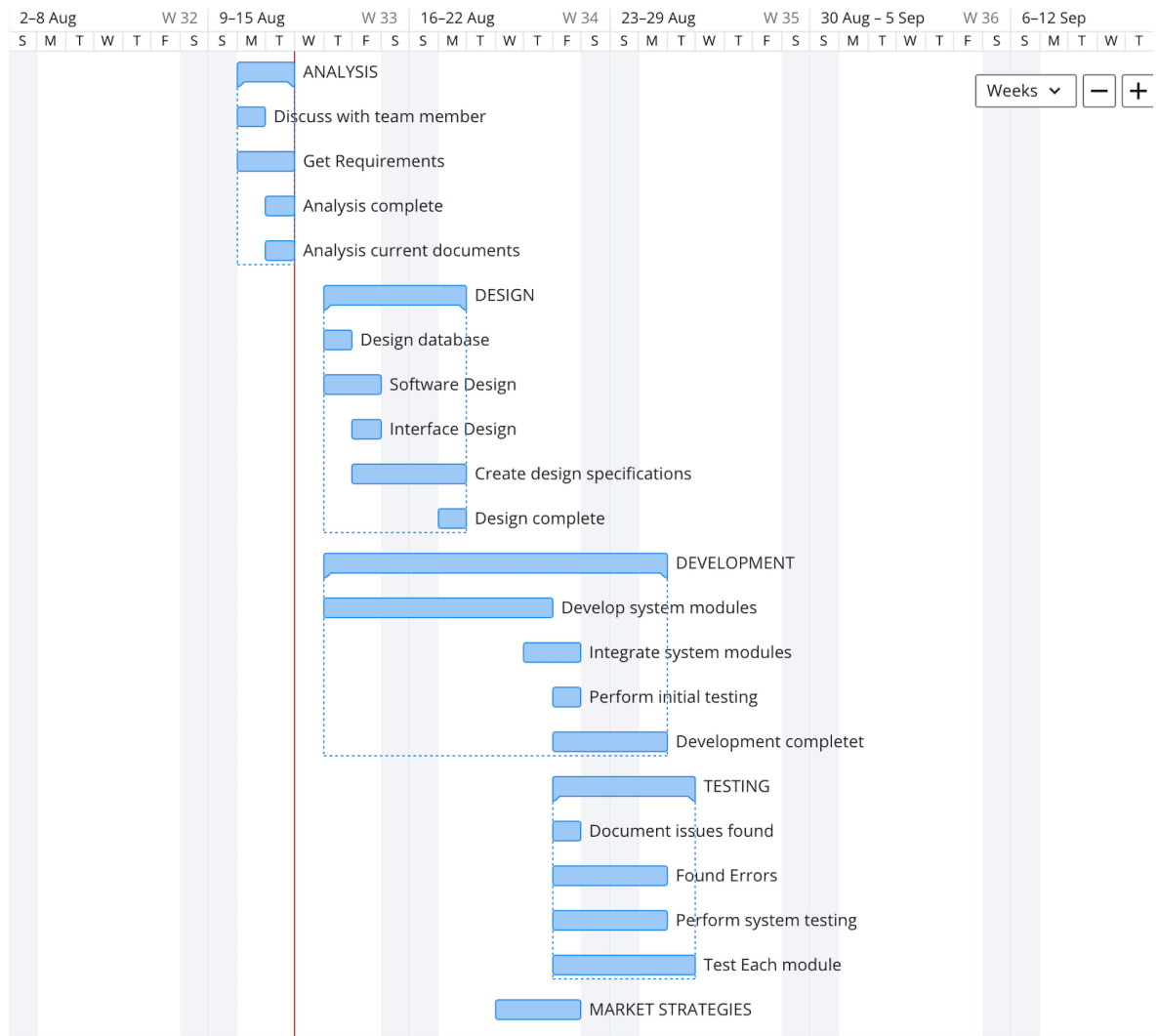
⚙	Title	Start date	Due date	Durati...
2	▼ ANALYSIS	10/08/2020	11/08/2020	2d
3	Discuss with tea...	10/08/2020	10/08/2020	1d
4	Get Requireme...	10/08/2020	11/08/2020	2d
5	Analysis comple...	11/08/2020	11/08/2020	1d
6	Analysis current...	11/08/2020	11/08/2020	1d
7	▼ DESIGN	13/08/2020	17/08/2020	3d
8	Design database	13/08/2020	13/08/2020	1d
9	Software Design	13/08/2020	14/08/2020	2d
10	Interface Design	14/08/2020	14/08/2020	1d
11	Create design s...	14/08/2020	17/08/2020	2d
12	Design complete	17/08/2020	17/08/2020	1d
13	▼ DEVELOPMENT	13/08/2020	24/08/2020	8d
14	Develop system...	13/08/2020	20/08/2020	6d
15	Integrate syste...	20/08/2020	21/08/2020	2d
16	Perform initial t...	21/08/2020	21/08/2020	1d
17	Development c...	21/08/2020	24/08/2020	2d
18	▼ TESTING	21/08/2020	25/08/2020	3d
19	Document issue...	21/08/2020	21/08/2020	1d
20	Found Errors	21/08/2020	24/08/2020	2d
21	Perform system...	21/08/2020	24/08/2020	2d
22	Test Each module	21/08/2020	25/08/2020	3d
23	MARKET STRATEGIES	19/08/2020	21/08/2020	3d

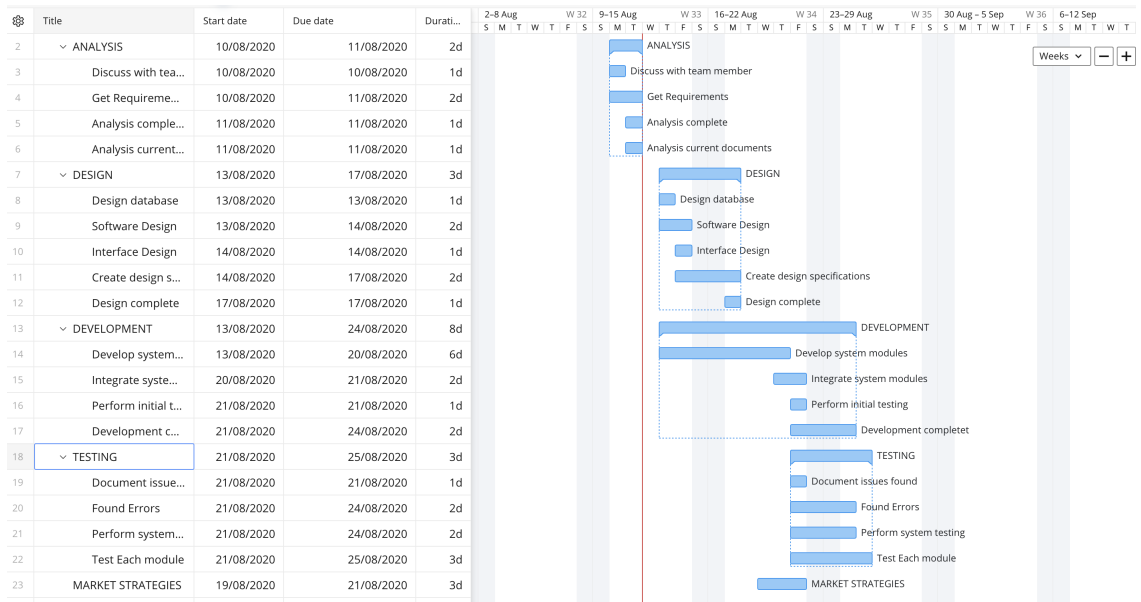
Tasks	Completed by	Date
Analysis Phase	RAJWINDER KAUR	11/AUG/2020
Design Phase	RAJWINDER KAUR	13/AUG-17/Aug
Development Phase	SANJEEV GUPTA	11/AUG-24/AUG
Testing Phase	SANJEEV GUPTA	21/AUG-25/AUG
Market strategies Phase	RAJWINDER KAUR	19/AUG-21/Aug

Work breakdown structure Table

GIANTT CHART

A Giantt chart, commonly used in project management, is one of the most popular and useful ways of showing activities (tasks or events) displayed against time. On the left of the chart is a list of the activities and along the top is a suitable time scale. Each activity is represented by a bar; the position and length of the bar reflects the start date, duration and end date of the activity.





1. Work done by RAJWINDER KAUR C0764948

ANALYSIS, DESIGN AND MARKETTING STRATEGIES PHASE

2. Work done by SANJEEV GUPTA C0761022

DEVELOPMENT AND TESTING PHASE

3. COMPETITIVE ANALYSIS

Competitor analysis in marketing and strategic management is an assessment of the strengths and weaknesses of current and potential competitors. Competitor analysis is an essential component of corporate strategy. A competitive analysis is a strategy where you identify major competitors and research their products, sales, and marketing strategies. By doing this, we can create solid business strategies that improve upon our competitor's. By performing a competitor analysis, we'll be able to:

- Identify gaps in the market

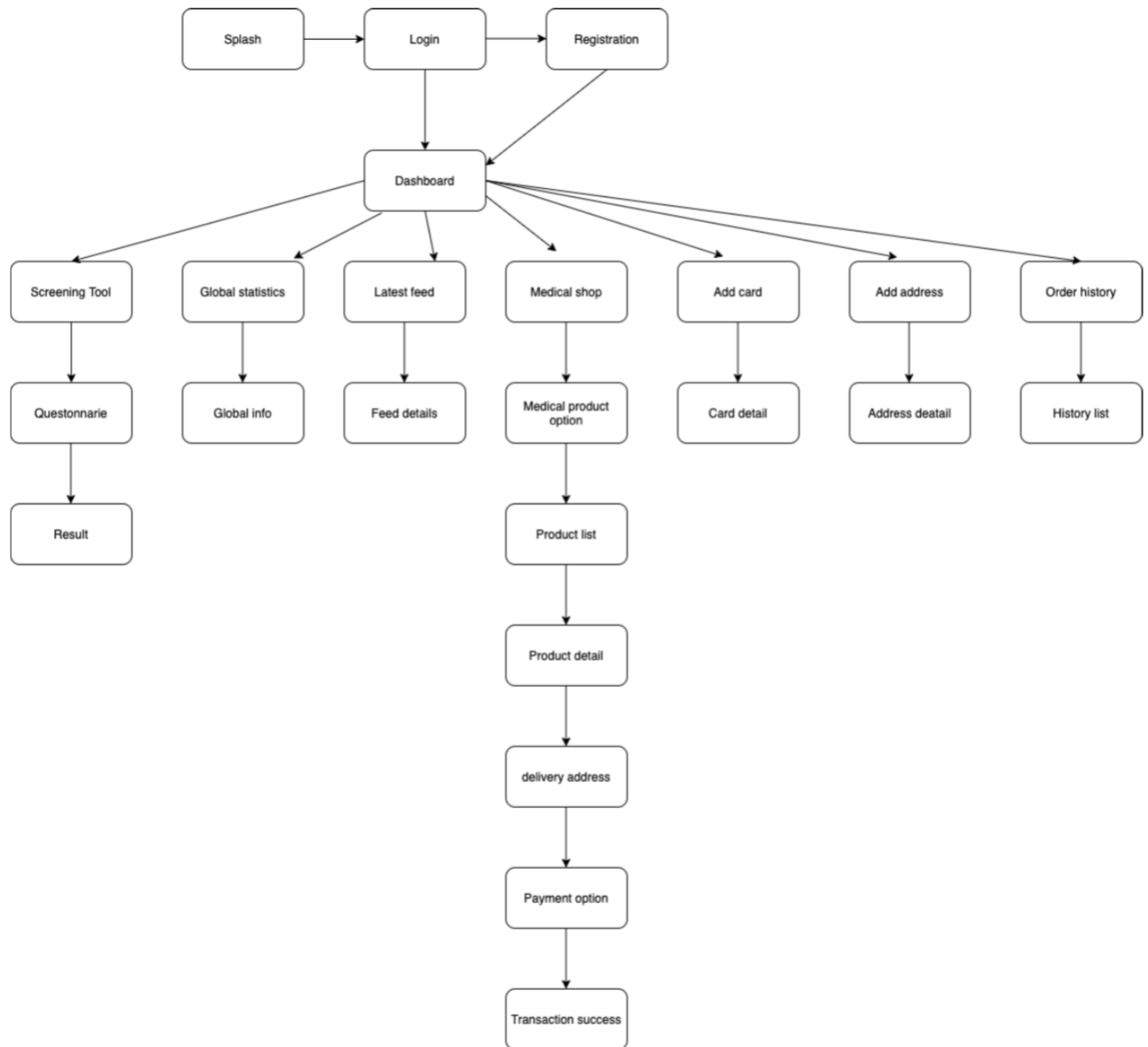
- Develop new products and services
- Uncover market trends
- Market and sell more effectively

Apps	Corona Safe	Canada COVID 19	COVID alert
Platform	Android	Android	Android
Overview	Our app enables the public to know whether they are positive or negative by giving quiz regarding their health for the Corona virus. User gets latest news regarding COVID 19. Also, users can purchase essential protection items such as masks, sanitizers using our app.	An app to stay informed about covid 19 based on risk factors, get updates and alerts on COVID 19.	Digital contact tracking app of COVID 19
Free/Paid	Free	Free	Free

Apps	Corona Safe	Canada COVID 19	COVID Alert
Revenue Model	In-App Purchases	Free	Free
Main Features	<ul style="list-style-type: none"> • Authentiaction • Medical shop • Global stat • Screening tool • Latest Feed 	<ul style="list-style-type: none"> • Update news • Stats • Self-check 	<ul style="list-style-type: none"> • One time key • Looking for exposures
Weakness	No Online consultation	basic information	Just a tracker to slow down the spread.

Apps	Corona Safe	Canada COVID 19	COVID Alert
Purpose	<ul style="list-style-type: none"> • Provide folks the resources they need to tackle the virus • Inform them about the latest updates 	To help folks to stay connected to updates on virus, test themselves.	A tracker to slow down the spread of virus
Problem Solved	<ul style="list-style-type: none"> • Global stats to stay updated • Provide a way for all folks to stay updated with the corona pendemics • Provide medical resources • Test themes for the virus 	<ul style="list-style-type: none"> • Stats to stay updated • Test themselves 	To stay safe by tracking the effective folks
Benefits	<ul style="list-style-type: none"> • Medical store • Global stats • Quiz to test virus • Authentication 	Knowledge about Corona	Track the effected and unaffected folks

4. USE CASES



Technical Information About the App:

1. MocPlatform: We are developing our application in Android Platform. We have chosen this platform as the maximum number of users are Android mobile users and this will target a greater audience. Another reason is that to deploy the application on Appstore is easy and cheap as well the membership charges are cheap as well the membership charges are 25 dollars for lifetime.

Reasons of using Native Application

- Very fast
 - Built to run on specific platform
 - Distributed in Play stores.
 - Interactive and intuitive
 - Interact with device utilities.
2. Language: We are developing the application in JAVA programming language.
 3. Database: The database we are using is fire base. We are using fire base authentication for login and sign up. For the authentication we used fire- base and for the local storage we used local room.

5. PRICING STRATEGY

A business can use a variety of pricing strategies when selling a product or service. The price can be set to maximize profitability for each unit sold or from the market overall. It can be used to defend an existing market from new entrants, to increase market share within a market or to enter a new market.

As our app is based on corona virus, it is Freemium model for the users. According to the situation of corona virus, nobody prefers to go out. In our app, we provide offers to our medical store to the users, so that they can get benefit from our app and stay safe by remaining in their homes.

MODULES	MODEL
SCREENING TOOL	FREEMIUM
LATEST FEED	FREEMIUM
MEDICAL SHOP	FREEMIUM
TIPS AND TRICKS	FREEMIUM
GLOBAL STAT	FREEMIUM