



**HACETTEPE UNIVERSITY
COMPUTER ENGINEERING DEPARTMENT**

UNDERGRADUATE PROJECT PROPOSAL

Project Name	Proposed Term
Prodemic	<input type="checkbox"/> Fall <input type="checkbox"/> Spring <input checked="" type="checkbox"/> Fall + Spring

Student Number(s)	Student Name(s)
21627744 21627782 21627026	Neşe Gamze Uyanık Kerem Üremez Kaan Nuri Beyhan
Supervisor(s)	Expertise Area(s)
Prof.Dr. Süleyman Tosun	<input checked="" type="checkbox"/> Software <input type="checkbox"/> Hardware <input type="checkbox"/> Computer Science <input type="checkbox"/> Other _____
Technical Complexity	Research Dimension
<input type="checkbox"/> Very Low <input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High <input type="checkbox"/> Very High	<input type="checkbox"/> Very Low <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <input checked="" type="checkbox"/> Very High

Owner(s) of intellectual property	Does the Project require ethics approval?
<input checked="" type="checkbox"/> Student(s) <input type="checkbox"/> Supervisor(s) <input type="checkbox"/> Company	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Company Representative	Is the Project supported by a formal body?
Company Name: Contact Name: Contact Email:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, name of body: _____

Project Coordinator	Proposal Approval
Date: 01.11.2020	<input type="checkbox"/> Yes <input type="checkbox"/> No If no, rational of rejection: _____

A. PROJECT VISION

I. PROJECT SUMMARY

The subject that our project will address is, as we all know, the coronavirus has become difficult to follow as a result of its spread to large masses. Our project aims to keep this spread under control and if large masses use this application correctly, it is aimed to take the necessary precautions early.

Keywords: pandemic, corona virus, square code, tracking, spread

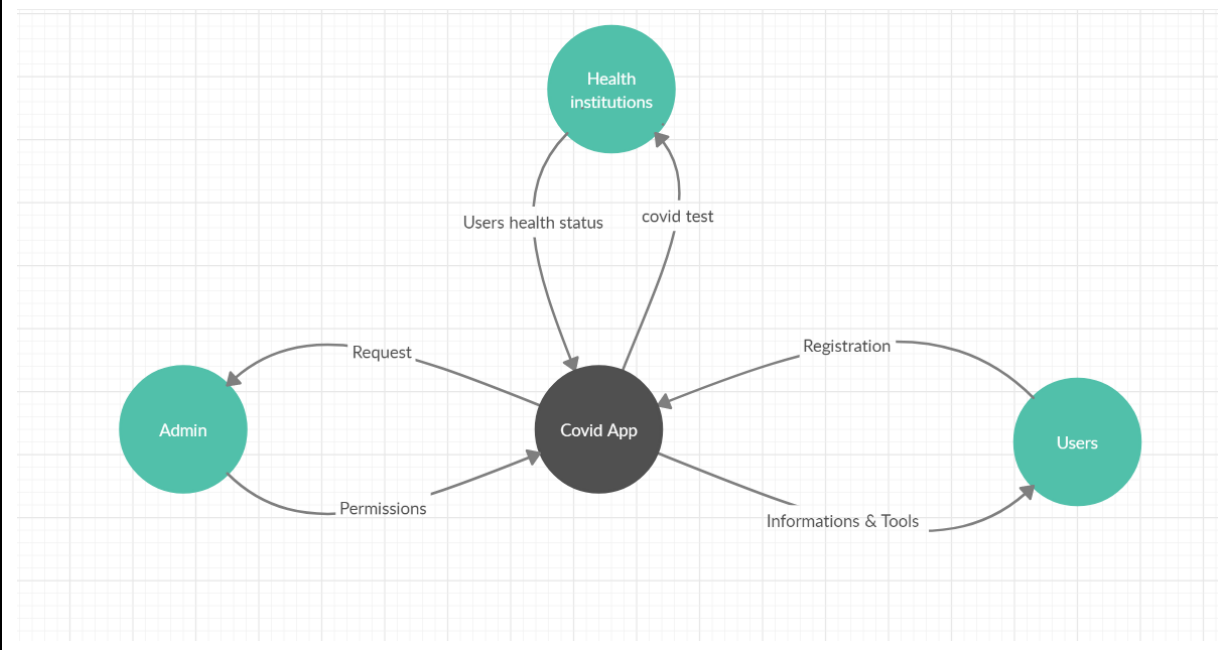
II. PRODUCT FEATURES

Realizing that a sick person is near you with Bluetooth Technology

Receive a Notification if a person you have been in contact with has become ill cause of Corona in the past 14 days.

Sending notification to polices when someone that has Corona go out while in quarantine. We will provide that with GPS.

Viewing users status with QR code Technology.



III. SUMMARY OF STATE-OF-THE-ART

We will make use of flutter technology and dart language while developing our application. With Flutter, we will be able to develop our application for both ios and android devices. We will collect the data including location and personal information we receive from people using the application in the firebase platform developed by Google.

IV. INNOVATIVE ASPECTS

The difference from current projects similar to our project is that it is more useful. By using the QR code, users will be able to easily create a control system for their status, and easily check it at the places where they will log in.

V. POTENTIAL CONTRIBUTION(S) TO INDUSTRY AND ECONOMY

As a result of the development of this project, a follow-up system will be established for other communicable diseases that we are in or may encounter in the future. The purpose of this tracking system is to make it easier for us to take precautions and recognize the disease before it spreads further, if someone we have been in contact with is diagnosed with a disease and we also carry a risk.

VI. TECHNOLOGIES TO DEVELOP/USE AND UNIQUE ACHIEVEMENTS

Dart
Flutter
Firebase
Bluetooth
GPS
Vs Code
Android Studio
QR Code

VII. METHOD TO FOLLOW

We will use MVC model in our project.

VIII. REFERENCES

- <https://flutter.dev/>
- <https://covid19.saglik.gov.tr/>
- <https://pub.dev/>
- <https://stackoverflow.com/>
- <https://medium.com/flutter-community>
- <https://www.youtube.com/>

B. PROJECT PLAN

I. PROJECT GOALS

As a result of the completion of this project as we want, we aim to create a more advanced model of the applications related to the pandemic currently used. The goals of this application are to facilitate patient follow-up, identify risky patients, and slow down the rate of virus spread.

II. PROJECT ORGANIZATION

The project team consists of 3 students studying at Hacettepe University.

Kerem ÜREMEZ - Kaan Nuri BEYHAN - Neşe Gamze UYANIK

Project team requirements: Computers and mobile devices.

Project members roles : Researcher and Developer.

Our work area is the home environment due to the pandemic. The whole team will work in full-stack. The general task of the team members is to participate in every stage of the project and to improve themselves on the Flutter technology they have just learned. Github, Zoom and Discord environments are used for communication and data sharing in the project.

III. PROJECT MILESTONES AND OBJECTIVES

Milestone #	Primary Objective	Due Date	Project Deliverable (if any)
1	We assume that everyone is using the application properly and correctly in order for the application to achieve its original goal.	05/2021	
2	All patients who will use the application must have a phone with bluetooth where they can download this application. And they must always carry these phones with them.	05/2021	

IV. PROJECT PRACTICES AND MEASURES

Task #	Task Description	Responsible Team Member	Start Date	Finish Date	Success Criteria
0	Learning Flutter Technology	All Group Members	18.10.20	1.11.20	Understanding Basics of Flutter Technology
1	Login/Logout Page	Kaan Nuri Beyhan	1.11.20	12.11.20	

2	Home Page	Neşe Gamze Uyanık	1.11.20	12.11.20	
3	Using Bluetooth Technology	All group Members	20.11.20	?	
4	View My Profile	Kerem Üremez	1.11.20	12.11.20	
5	Edit My Profile	Neşe Gamze Uyanık	12.11.20	20.11.20	
6	User Authentication	Kaan Nuri Beyhan	12.11.20	20.11.20	
7	QR Code	All Group Members	20.11.20	?	
8	Using GPS Technology	All Group Members	20.11.20	?	
9	Send Notification	All Group Members	20.11.20	?	
10	Changing Status of Users	Kerem Üremez	12.11.20	20.11.20	
11	Firebase Rules	All Group Members	20.11.20	?	

V. PROJECT BUDGET

Item #	Description of Income	Date of Income	Amount
1	Since our project will be presented to the school, there is no expected source of income at this time.	-	-

Item #	Description of Expense	Date of Expense	Amount
1	Electricity usage expenses.	-	-

VI. PROJECT RISKS

Risk Item #	Description	Probability	Effect	How to handle its occurrence? (Plan-B)
1	The possibility that our application may not have less interesting features than similar applications in the market.	High	Low	We can add more new features and make performance improvements in our application than similar applications.
2	If too many people use our application, the size of our database will not be enough.	Normal	High	We are using Firebase with free license for creating our database. We can buy or hire a server.