



FINAL REPORT

Istanbul Sehir University

College of Engineering and Natural Sciences

ENGR497 Global Design Project I Analysis

Mobile Sentry Pharmacy Application for Android

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ABSTRACT:

In our application, we aim to achieve up-to-date and accurate results. We will fetch the data which include address, the cell number of pharmacy on duty from website. Then, we will turn into android application. We aim to design a convenient and easy interface that everyone can use.

When people need the pharmacy on duty, they will download our application to their phones and they will be able to easily reach the name, phone number and location of the pharmacy on duty. Thus, their lives will be easier in emergency situations.

In our meetings, we discussed how to proceed on our project. We then explored the stages of the progress and exchanged ideas. We decided to use which language and modules to use. We have searched and provided resources that could be useful to us in our project. We examined these resources. We got an idea from the people who were experienced in software and gave us advice about the stages of our project. At the same time, we started to design the interface of our project in our last meetings.

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3) Introduction:

Finding the pharmacy on duty can be difficult nowadays. People can have difficulty in finding a pharmacy in case of emergency, and our goal is to reduce this difficulty. Some pharmacy guards may not be wrong or out of date. People often need a referral to a hospital to find a pharmacy, or a pharmacy list on duty in any pharmacy. So our application objective is to be beneficial convenient and to save up both time and energy.

4) LITERATURE REVIEW, BACKGROUND

We review the literatures like Python ve Kivy ile Cross Platform Uygulama Geliştirme for all parts and progress, kivy.org that provide information for GUI part, Json.org that provide information for fetching data from website such as:

<http://apps.istanbulsaglik.gov.tr/Eczane/#maltepe>.

5) BODY of the REPORT: (Consists of subchapters.) Presentation of the Model and Methods, Assumptions, Description of Project Activities, Data Collected, Analysis...

Our android app consist of 4 page. These are login page, pharmacy location list page where clients can choose wherever they want, List of pharmacy name page, pharmacy information page which include name of pharmacy, telephone number, address, location, short address description.

There are five steps of this project. These are; Research, analysis and planning, reporting, testing and application/presentation. Project activities can be grouped under two main headings: GUI part and fetching data part.

In GUI part of our project steps which some of them is completed as follows: first step was layout from kivy that help us to arrange the rows and columns, in addition we used the other GUI components according to kivy coordinate system and kivy properties. Second step after adjusting the window's dimensions, we will turn off the resizing. When we move our

application to the platform return, home and search button will be available. These buttons will have different function.

In fetching data part of our project steps as follows: we will use json module when dealing with json data, when we fetch data from network environment we will take advantage of kivy's network module.

6) EVALUATION: (Findings, considerable results of the research.)

- Kivy is a Python module where programs can be run on mobile devices. With Kivy, programs can be run on almost any platform (Cross platform).
- We will use kivy's objects like BoxLayout, Grid Layout, size_hint, bind, Text input to edit the window in our application.
- In our application, we need list view for pharmacy and pharmacy information. We will use the *ListView* and *SimpleListAdapter* objects for this. This parameter takes the elements that will be listed in the Python list. And we can use objects such as *DropDown* and *on_release* to select from these lists.
- We will use ModalView to improve the quality of our project to create an alert window when we click the back or close button in our application.
- We can use time module to break json data.
- SQLite is a common database system for fairly fast, small, large data. In addition, programs written in different languages can be easily accessed and distributed over the network. The SQLite connection with Python is performed with the sqlite3 module. We can use this module for our data. In Python, the SQLite3 command contains objects such as connect, execute insert, update, and delete. With these objects we can link and adjust our data.
- Kivy's network module also offers the opportunity to do more than one job at the same time. It prevents sudden shutdown of the program.
- We will use the ScrollView module to edit components that don't fit the screen.

- We will download kivy launcher from google play store to run our code on android phones.

When we run this program it will automatically create kivy folder on the phone. Kivy Launcher can launch multiple applications. For run the application, we need to create a folder named kivy in your SD disk and save our application in a folder in this folder.

7) CONCLUSIONS: (Implications, candidate points to focus in ENGR 498.)

The purpose of our application is to facilitate people's lives about health and create an informative platform. We will use some information of pharmacy on duty from website. Then, we will turn everyone into an easy-to-use mobile app where people can easily access pharmacy information on duty. This application will be open to the development and renewal. Candidate points to focus in ENGR 498 are developing our app interface and contents. We want to add informative notes about medicine and health to home page. We want to differentiate our application from other applications by turning from pharmacy application to health platform.

8) REFERENCES (reference title, authors, source, date...)

Kesenek, Y. (2016). *Python ve Kivy ile Cross Platform Uygulama Geliştirme*. istanbul: Level Kitap.

<https://kivy.org/#home>

<https://json.org/>

<http://apps.istanbulsaglik.gov.tr/Eczane/#maltepe>.

<https://media.readthedocs.org/pdf/kivy-tr/latest/kivy-tr.pdf>

