Students Parking Management System (SPMS)

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Introduction & Background

Now, as the number of students in the universities increases, most of them came to the university with their cars. One of the problems that face students is the finding of a suitable parking area, especially at peak hours. Most of the students keep looking for a place to park their cars. This procedure ends with some students leaving their cars in illegal places to try to reach their lectures on time. Accordingly, the goal of our project is to develop a mobile application to manage the students parking area. The system will display the available parking area for all parking levels. The system will depend on RFID sensors in managing the leaving / parking cars. This will help students discover the suitable parking areas for their cars at any time and directly park their cars. The application will help students arrive on time and avoid the traffic jam around university gates.

Objectives

1. Develop a working prototype for the Students Parking Management System based on RFID technology

2. Develop a website for the Students Parking Management System

3. Create a database to record the status of the parking areas with the help of RFID technology

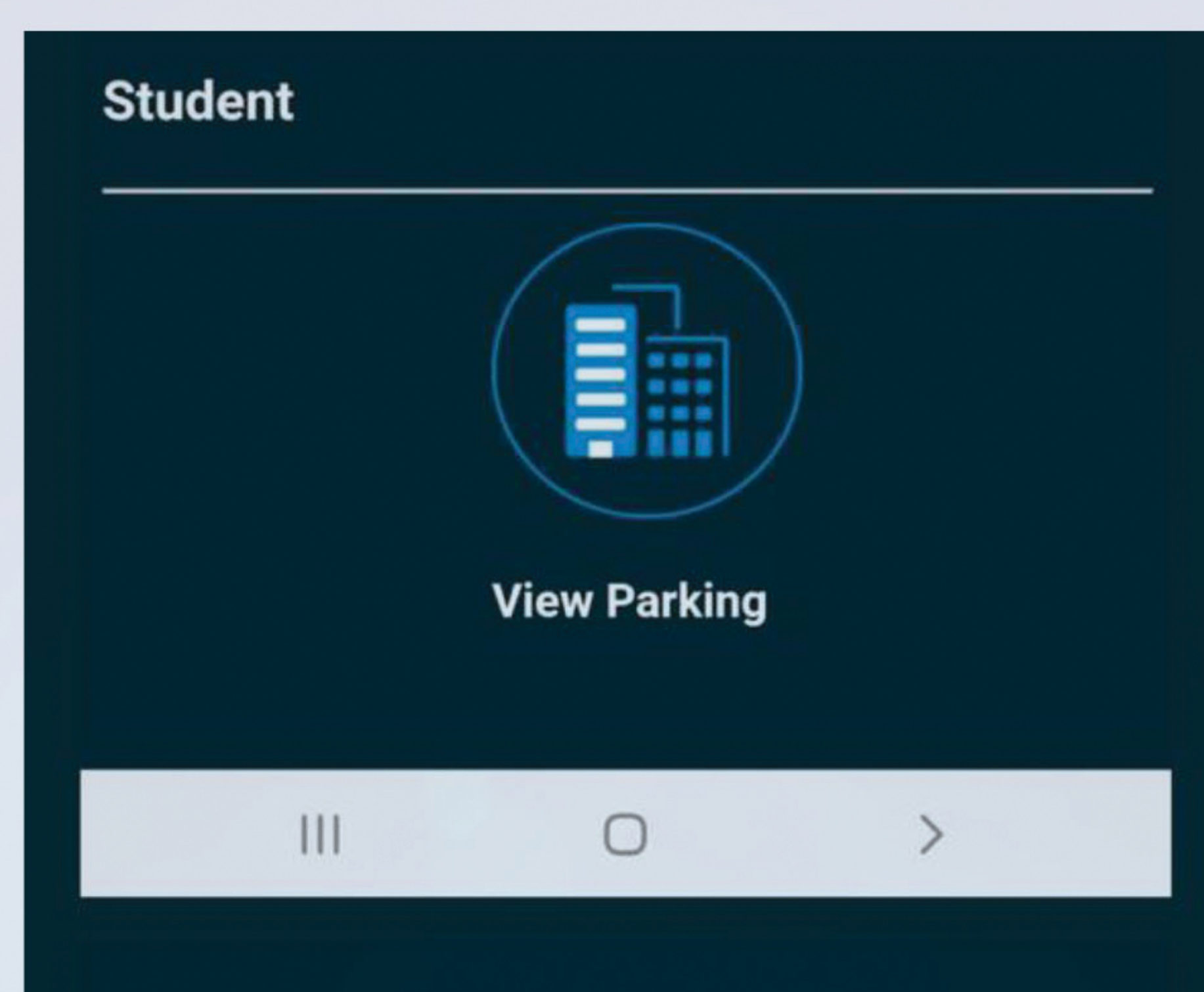4. Develop an Android Application to support the above-mentioned system
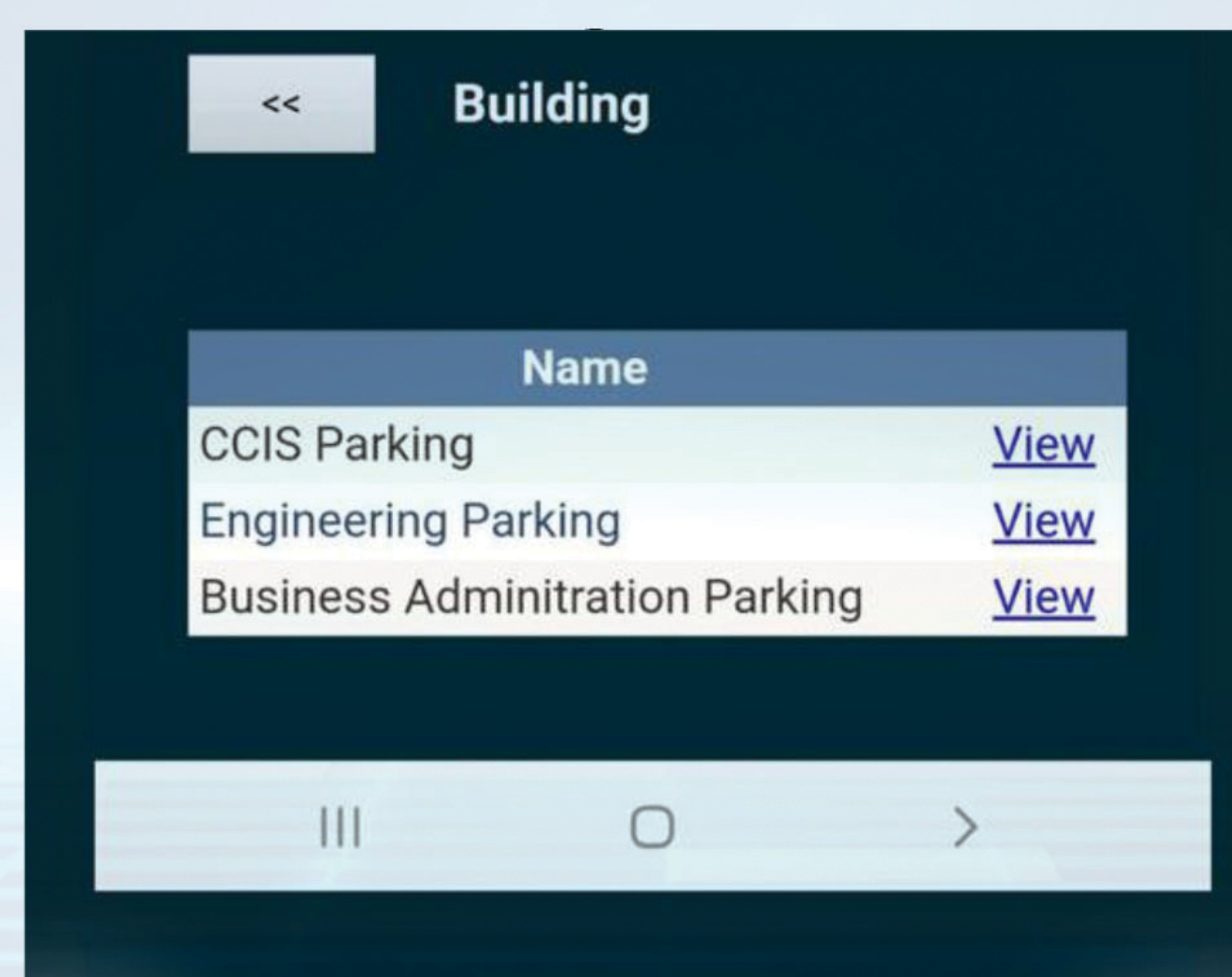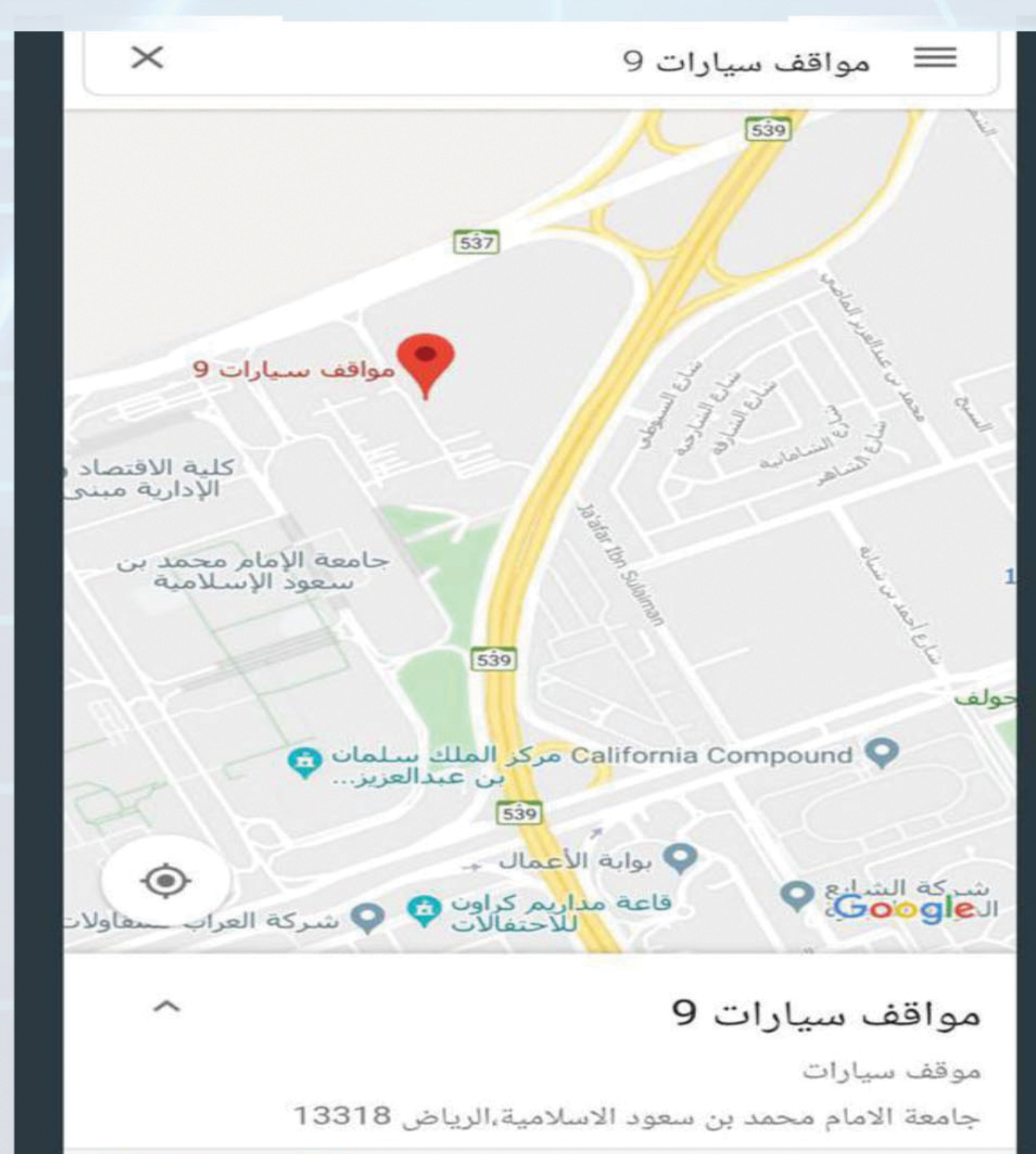
Methodology

Planning
Analysis
Design
Implementation
System
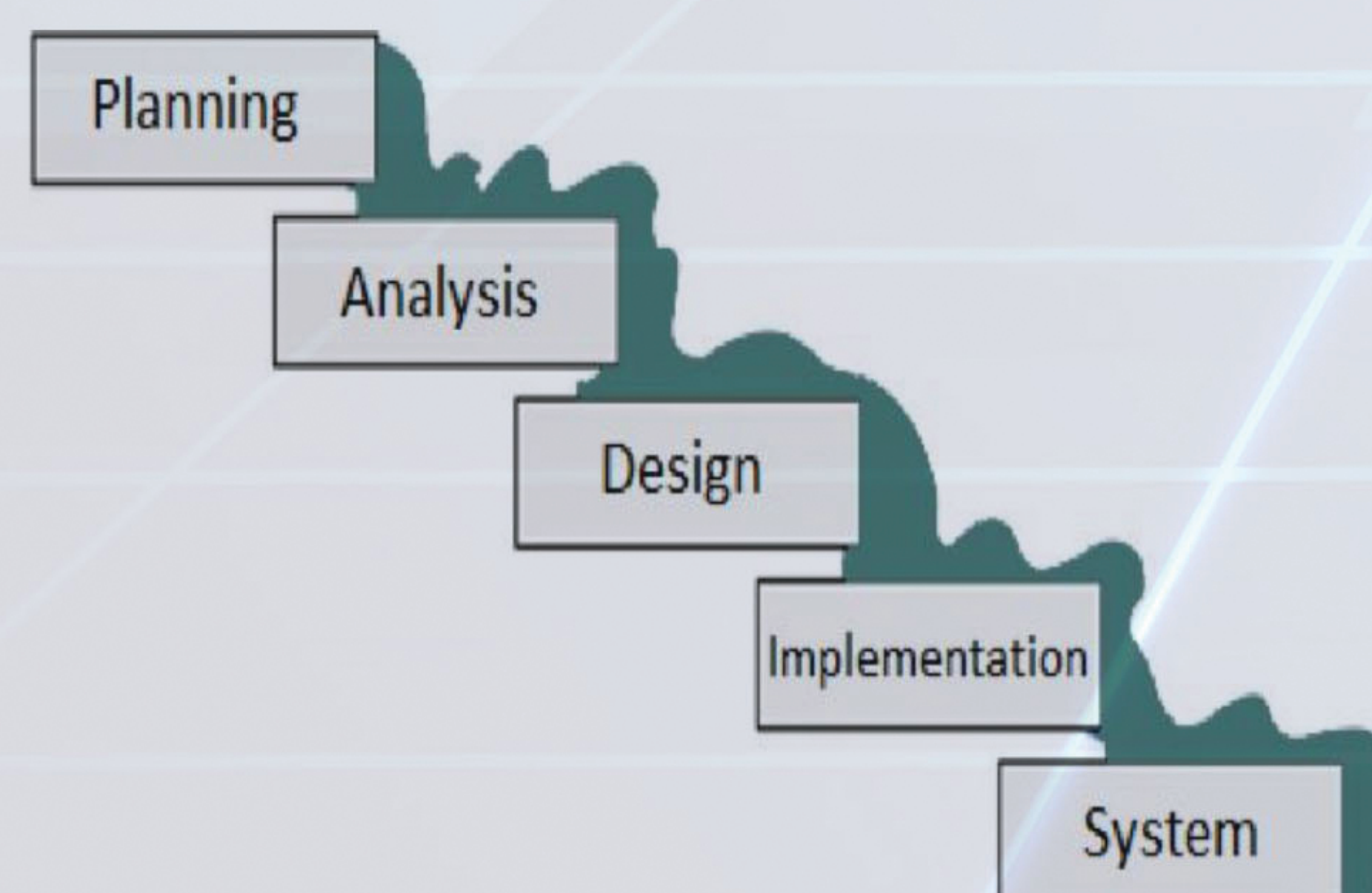
Results
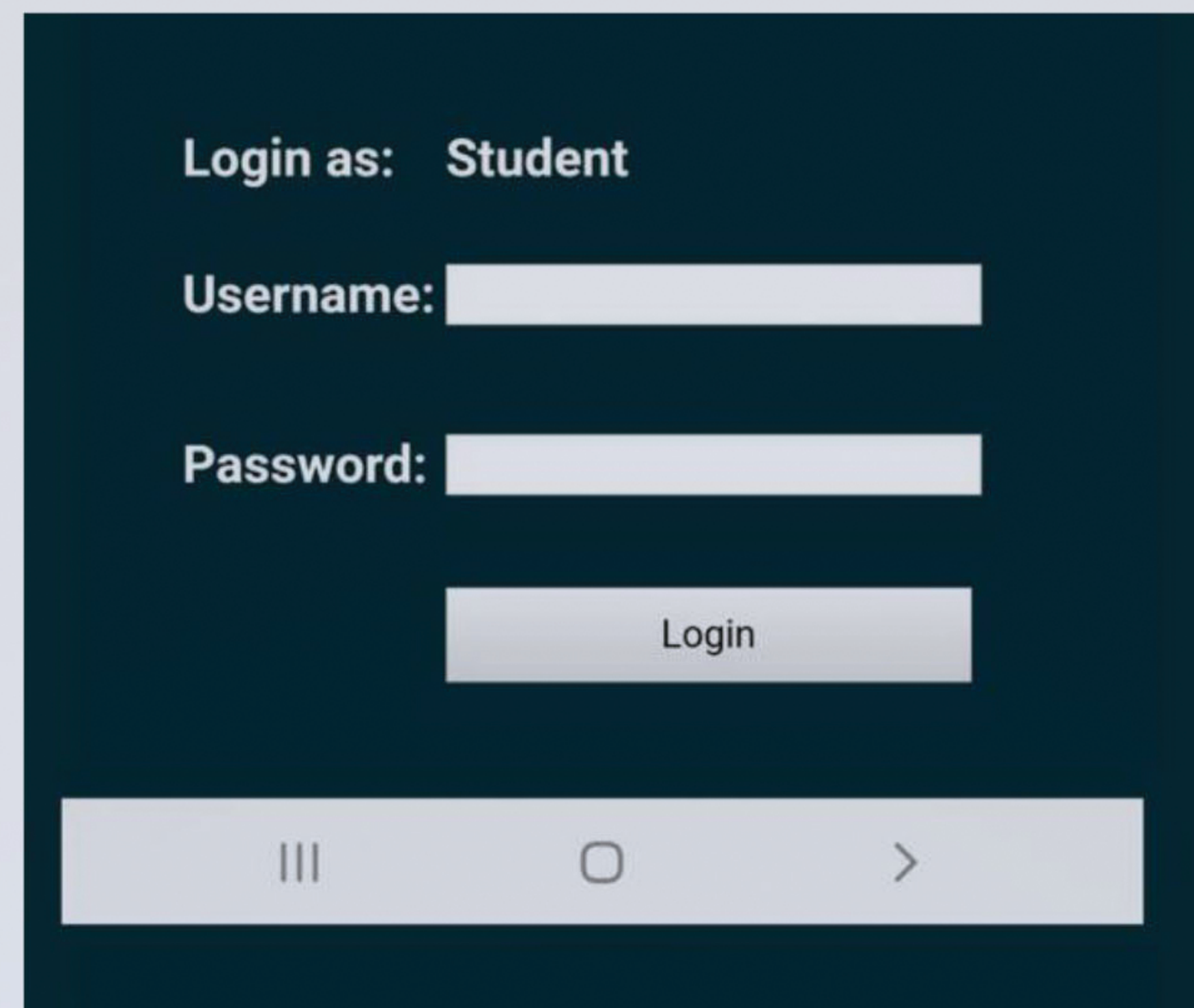
Login page

Main screen for student

Building Interface

View Map Location

Conclusion

In the end, after we implement our parking system. The SPMS will improve the university system and will help students by facilitating the finding of suitable parking for them. the parking area will be more organized, and it will be easier to manage the parking area by the security.

Future work

In the future, the system could be developed to add more functionality to the system such as makes some parking for rent for a monthly charge. The system also could provide the student to receive a notification when favorite parking is available. Another feature can be added is to add the Arabic language to the interface.

References

1. B. Smith, "Parking Goes Hi-Tech," 1 July 2017. [Online]. Available: https://webcpm.com/Articles/2017/07/01/Parking.aspx?Page=1. [Accessed 12 March 2019].
2. Mamta Gahlan , Vinita Malik , Dheeraj Kaushik, "GPS BASED PARKING SYSTEM," COMPUSOFT, An international journal of advanced computer technology, 2016.

Acknowledgment