PARKING FINDER APPLICATION

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ABSTRACT

The obstacle of locating a vacant spot in streets that are also available is not an easy task for people. As drivers waste a lot of their time and effort driving through the streets trying to find a spot and they get more unsatisfied with this process that they go through repeatedly during their daily life. Hence, our purpose and motivation are to try to solve the previous issue. We want to save people's time and effort they exert every day, so we thought of an application that provide the user to book a parking hourly, daily or monthly and this will be pre- pay with visa or Fawry, also user can view the locations with their number of vacant spots and decide which place is better and which they would like to head to. Our project mainly focuses on solving the parking issue whether in the streets and help user to get his desired destination with estimated duration and price. Parking Finder is an innovative mobile application designed to help people find available parking spots in cities. The app uses real-time data to locate parking spots, providing users with a hassle-free experience of searching for a parking space. With its user-friendly interface, Parking Finder allows users to easily search and reserve parking spots based on their preferences, such as location, price, and availability. The app also offers features such as navigation to the selected parking spot and payment options. By offering a convenient and efficient parking solution, Parking Finder helps to reduce traffic congestion and improve the overall driving experience for people living in urban areas, it simplifies the process and helps you find the best option to suit your needs.

KEYWORDS: mobile application; parking system; parking QR.

1. INTRODUCTION

Nowadays the world is getting bigger and the digital world is being expanded. In addition to the issue of the expansion of population all over the world especially in Egypt. It is thought that most people already own at least one car. The number of drivers is getting bigger on a daily basis, and more people are having an issue that they cannot find a place to park their car easily and it takes them a lot of time. Hence, parking slots are getting more insufficient every day. The obstacle of locating a vacant spot in streets that are also available is not an easy task for people. As drivers waste a lot of their time and effort driving through the streets trying to find a spot and they get more unsatisfied with this process that they go through repeatedly during their daily life. Furthermore, our purpose and motivation are to try to improve utilization of objects detection by taking pictures or live frames of streets and garages to solve the previous issue as it will increase the efficiency in a digital way using technology. We want to save people's time and effort they exert every day. Our Project mainly focuses on solving the parking issue whether in the streets or garages. We all are encountering that issue on a daily basis and it leads to wasting a lot of time and effort to find a vacant spot. Our Goal is to facilitate the operation of finding vacant spots in the crowded streets, the uncrowded streets and the garages, also to minimize the messy process of parking. It is about having an online system that detects unoccupied spots in certain areas via object detection. Our app allows user to compare spots, rates, and pre-pay for parking.

App/Feature	SpotHero	Best parking	Parknav	Parkmobile	Our app
Pre-booking	X	X			X
Feedback	X				X
Bookmark	X			X	
Free trial			X		
Not free	X	X	X	X	X
Cancel reservation	X				
Scan code					X

Figure 1. Comparative works

2. METHODOLOGY

The Agile model is a project management methodology purposely adopted for the development of sophisticated software. The framework allows for iterations, which helps a lot in minimizing mistakes and errors that commonly occur. The model divides the project into a series of development cycles or short time boxes, which are assigned to each professional on the project team. It is a collaborative approach that allows a response to rapid change. It is flexible enough to accommodate changes in project requirements throughout the mobile app development lifecycle.

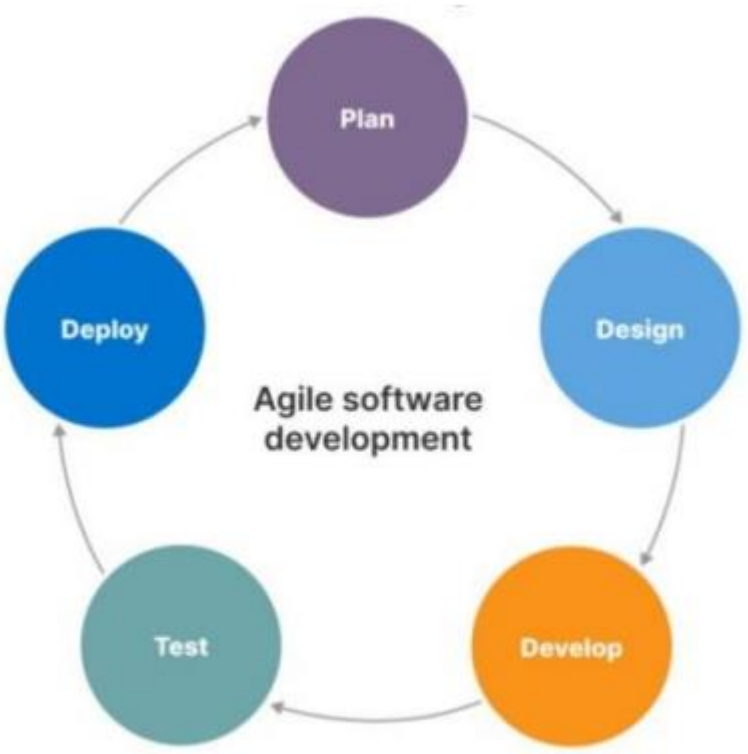

Figure 2. Agile software development

3. RESULT

Our application has been finished and you can use it to book available spot, view parking detail, write your feedback of application and you can share location area. We have also implemented all of our requirements determination and achieve our goal from this project which is help users.

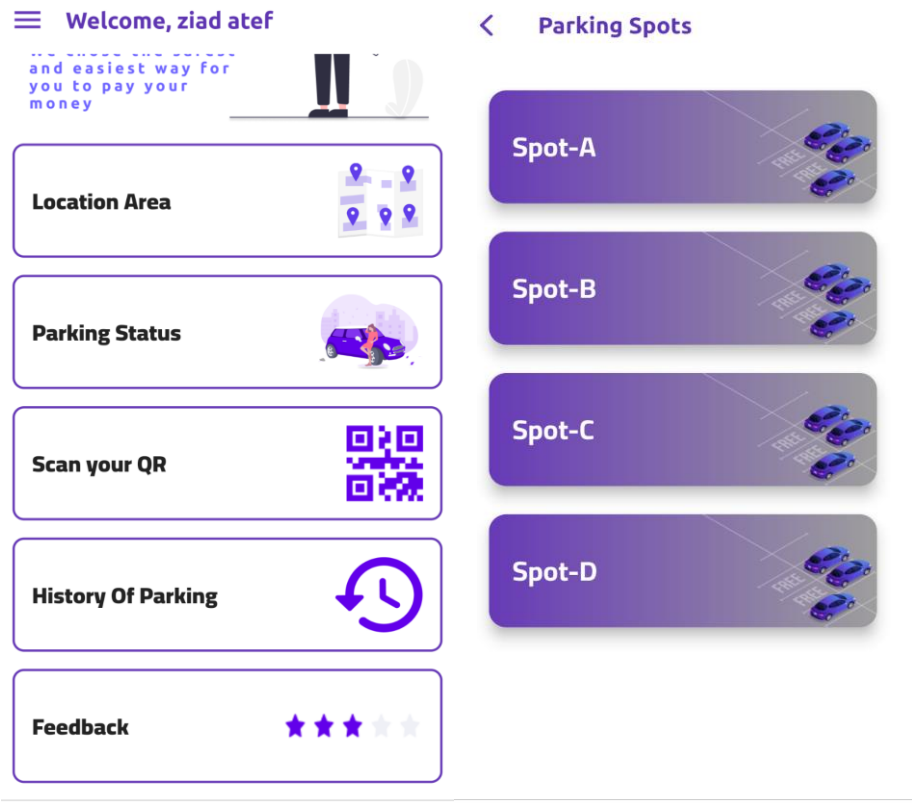

Figure 3. Screenshots from our application

4. DISSCUSSION

The results obtained from the development process are discussed, comparing them with other studies or generally accepted knowledge in the field. The method and results are critically analyzed, including any simplifications made during the process.

5. CONCLUSION

our goal was to make an application that provides users an easy way of reserving a parking online where users can view various parking spaces and select nearby or specific area of their choice to view whether space is available or not. If the booking space is available, then user can book it for specific time slot. It will saves user time and effort. At the end, we have come up with a program that made it easier for drivers to find suitable vacancies for them in terms of time and money.

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