

ParkHere Implementation

Team Black Lightning

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Preface

The Implementation document describes any changes we made to the architectural and detailed designs. Documentation includes: an introduction, the architectural changes, the detailed design changes, and the requirement change.

Introduction

The ParkHere application is a PRSP built for Android devices. ParkHere is a platform created to solve the problem pertaining to the difficulty that some drivers may have while finding parking spaces. This platform will allow owners of free lots or parking spaces to publish the spaces that they are willing to share onto the application. Users who are looking for parking spots are able to search their desired location to search and see if there are free parking spaces. These transactions will be temporary and only available to the seeker for specific time slots. As this application will act as the intermediary between the owners and the seekers and fill the need that many people have while finding parking in crowded cities.

Architectural Changes

For the architecture, there have not been any changes. We are still using the Model-View-Controller pattern to separate the UI and the data.

Detailed Design Changes

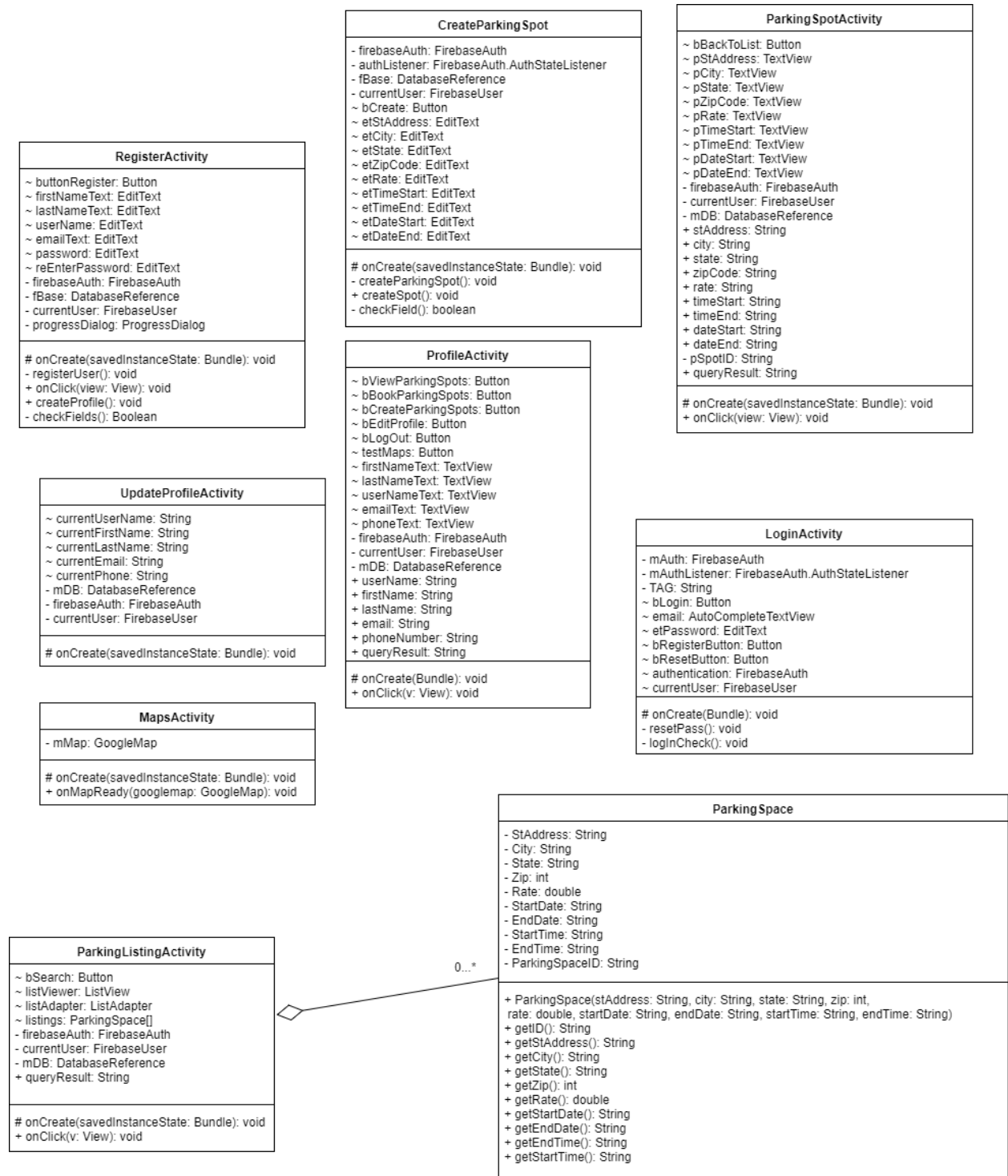
1. What detailed design changes did you make during implementation?

We got rid of all our planned classes and replaced them with activity classes. Because of this, we need a new class and package diagram. The “ParkingSpot” class has been replaced with the “ParkingSpace” class.

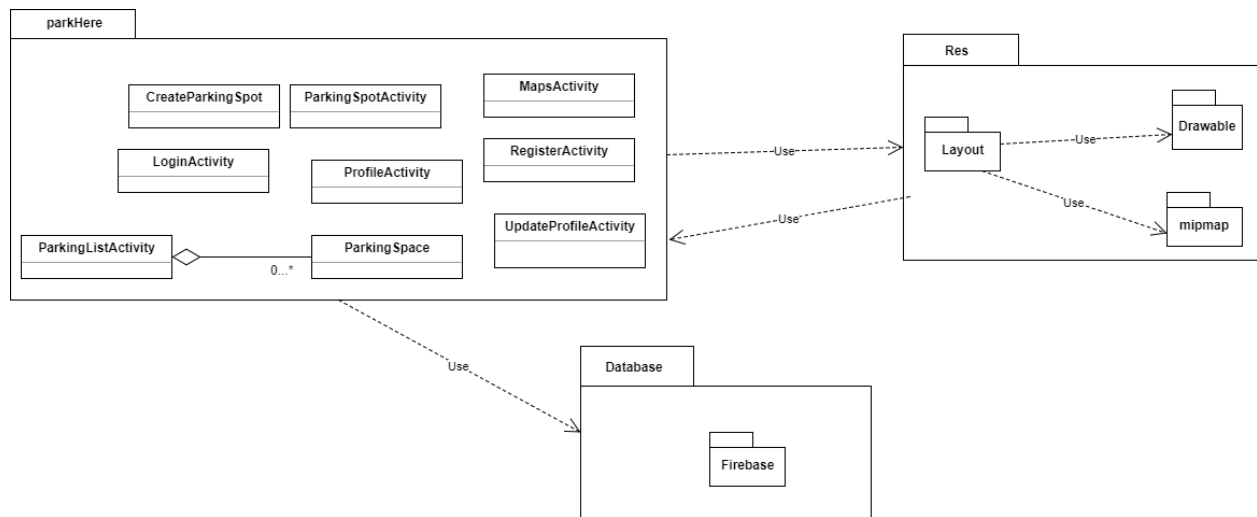
2. What’s the rationale behind the decision change?

The old classes were unnecessary as we could put in values into the database instead of storing them into the classes. The new activity classes are necessary for the Android app. We need to update the class and package diagram to accurately show what classes we are using.

New Class Diagram:



New Package Diagram:



Requirement Change

Imagine now your ParkHere system should support “split” booking. For example, the availability of a parking spot is 10/01/2017 - 10/08/2017. A seeker can book this parking spot from 10/02/2017 to 10/05/2017, and another seeker can book the same parking spot from 10/05/2017 to 10/07/2017. Similarly, “hour” booking can be split as well. Please answer the following questions.

1. Does this change your design?

This changes our design because we originally envisioned the parking spot to only be taken by a single person for the entire duration of the booking.

2. If not, why not?

N/A

3. If so, what should be changed and how?

The booking time implementation needs to be changed. We now need a way to be able to split up the booking times for multiple people.