

ParkFinder
Detailed Design Document
SE 3A04

Abdul Ahad
akhterraa

Salma Belal
belalsm

Josh Chatten
chattejj

Nathanael Jordan
jordanen

Robert Stuart
stuarrr2

March 27, 2016

Contents

1	Introduction	2
1.1	Purpose	2
1.2	System Description	2
1.3	Overview	2
2	State Charts for Controller Classes	3
3	Sequence Diagrams	7
4	Detailed Class Diagram	7
A	Division of Labour	10

1 Introduction

This section provides an brief overview of the entire document.

1.1 Purpose

The purpose of this Detailed Design Document is to provide a description for the detailed design of the ParkFinder app. The description of the design will allow anyone who will be involved in the development of the system to proceed with an understanding of what is to be built and how it is expected to be built. This document provides a description of the system's classes and static structure, as well as diagrams that describe the dynamic behaviour of a system in response to external stimuli, and diagrams that describe the interactions among classes in terms of an exchange of messages over time.

The intended readers of this document include all of the project's stakeholders. This includes the end-user, the software engineers, and the park authorities.

1.2 System Description

The software system being described in this document is called the ParkFinder app. This system will have datasets of information about parks from all over the world and will allow the client to use search methods in order to find parks based on the clients' desired attributes. The app is meant to be used anywhere in the world, provided an Android or iOS device with the app installed. This provides clients with an easier, faster, and more efficient way to look up parks and acquire information such as the location, facilities, activities, and rentals that the parks provide.

1.3 Overview

The remainder of this document will contain diagrams and information that will describe the details for the software system being built. This will include State Charts for controller classes in Section 2, Sequence Diagrams in Section 3, and a Detailed Class Diagram in Section 4.

2 State Charts for Controller Classes

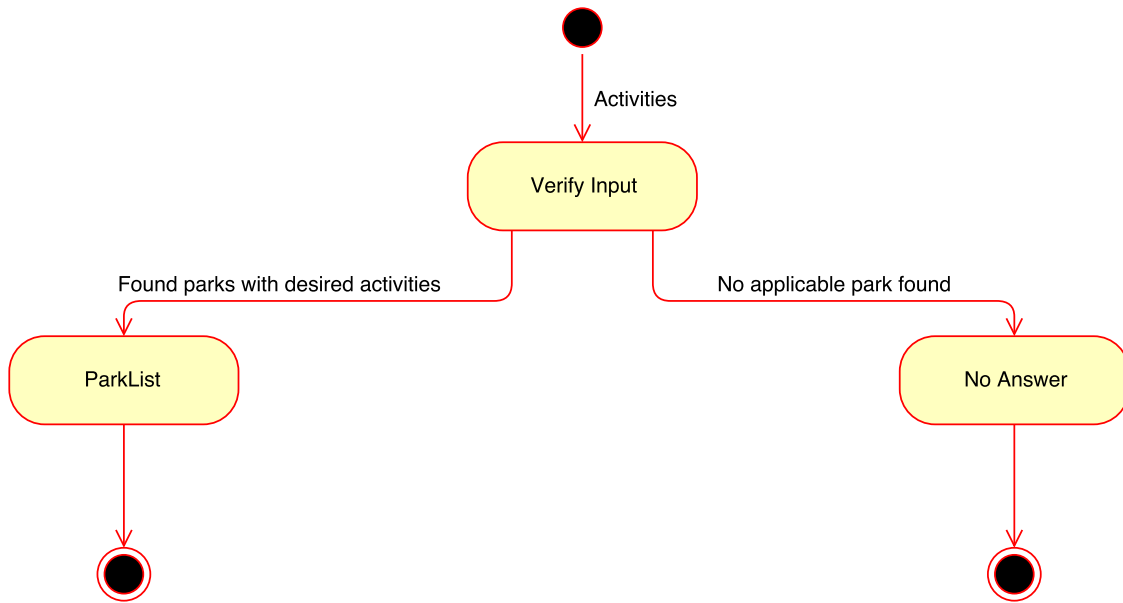


Figure 1: State diagram for the Activities Expert

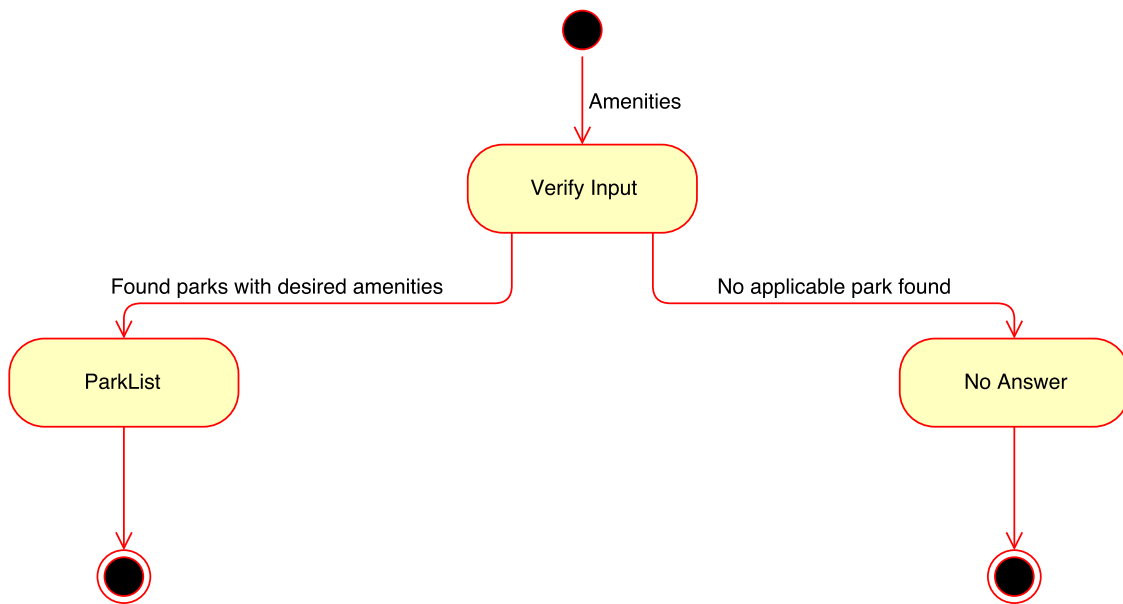


Figure 2: State diagram for the Amenities Expert

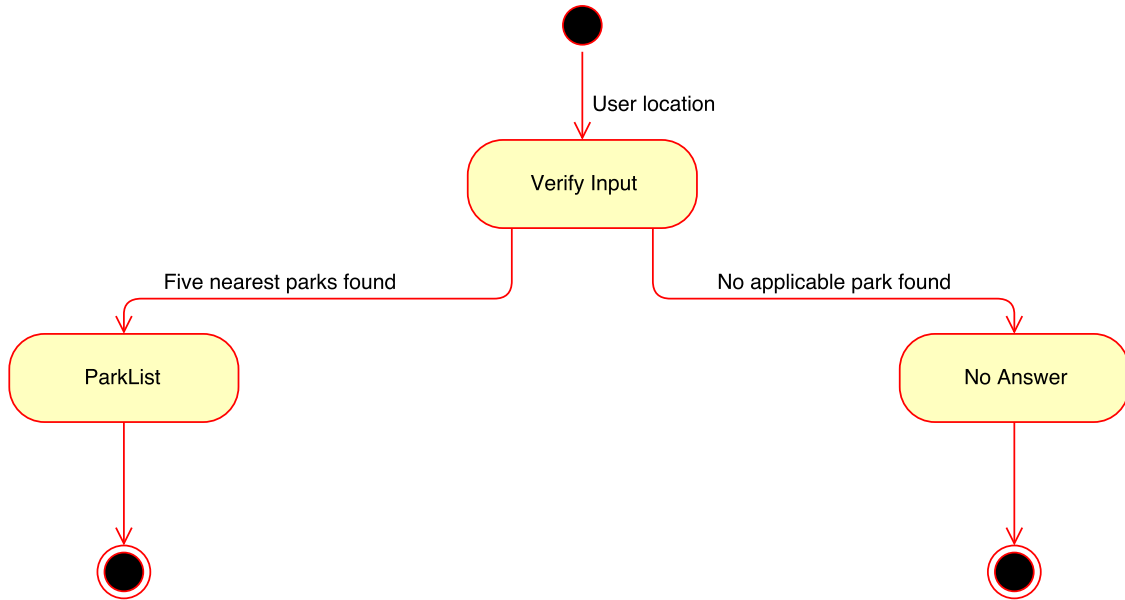


Figure 3: State diagram for the Location Expert

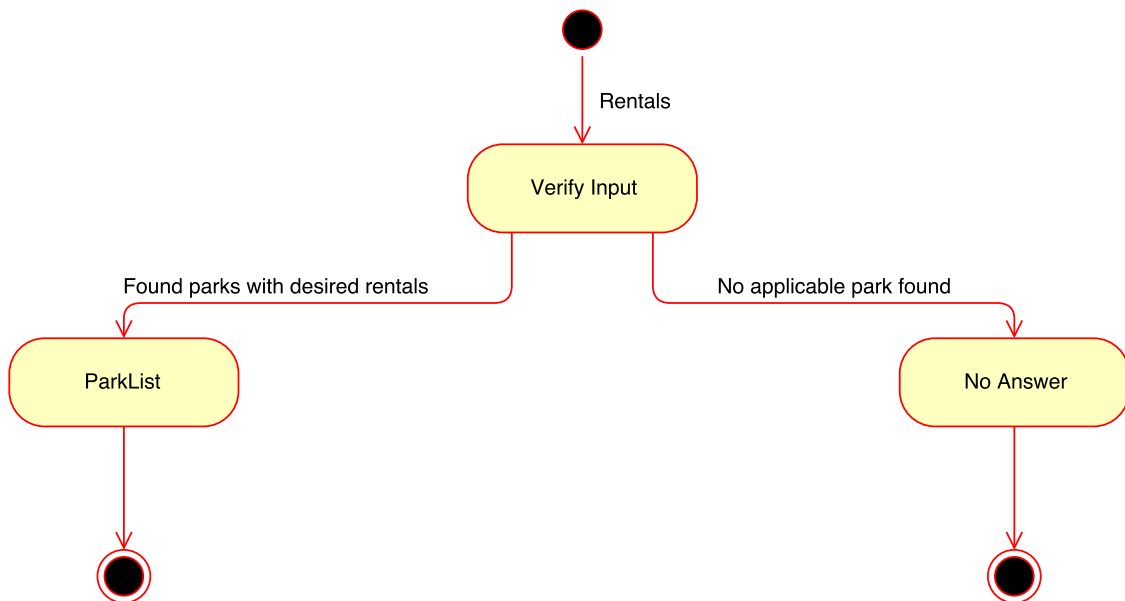


Figure 4: State diagram for the Rentals Expert

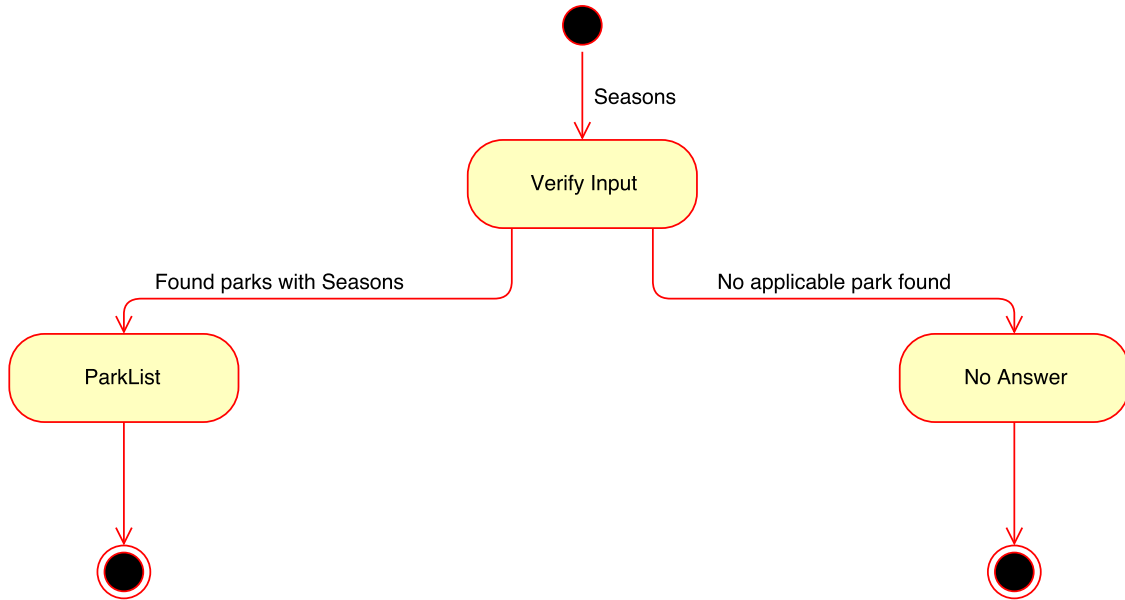


Figure 5: State diagram for the Seasons Expert

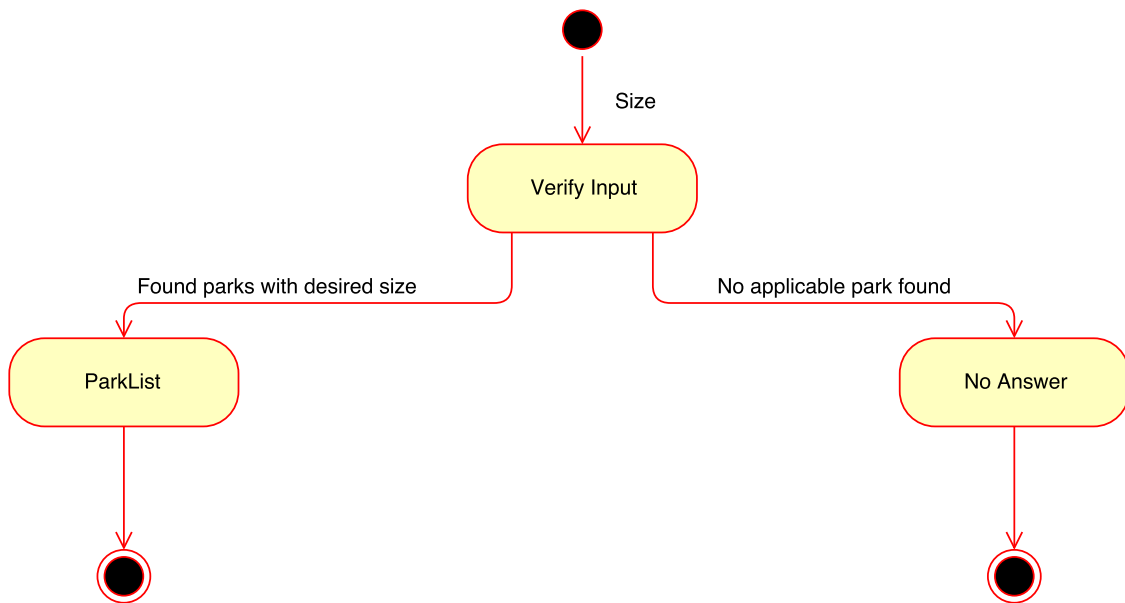


Figure 6: State diagram for the Size Expert

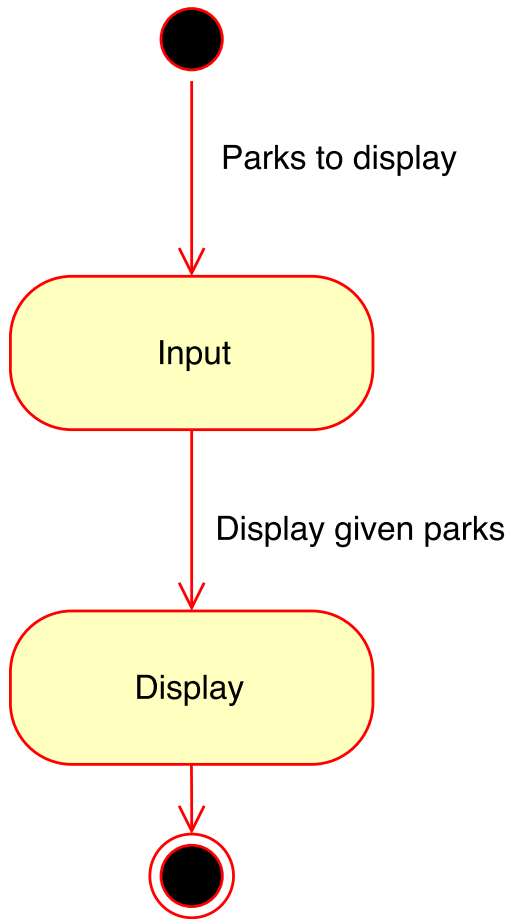


Figure 7: State diagram for the Map Agent

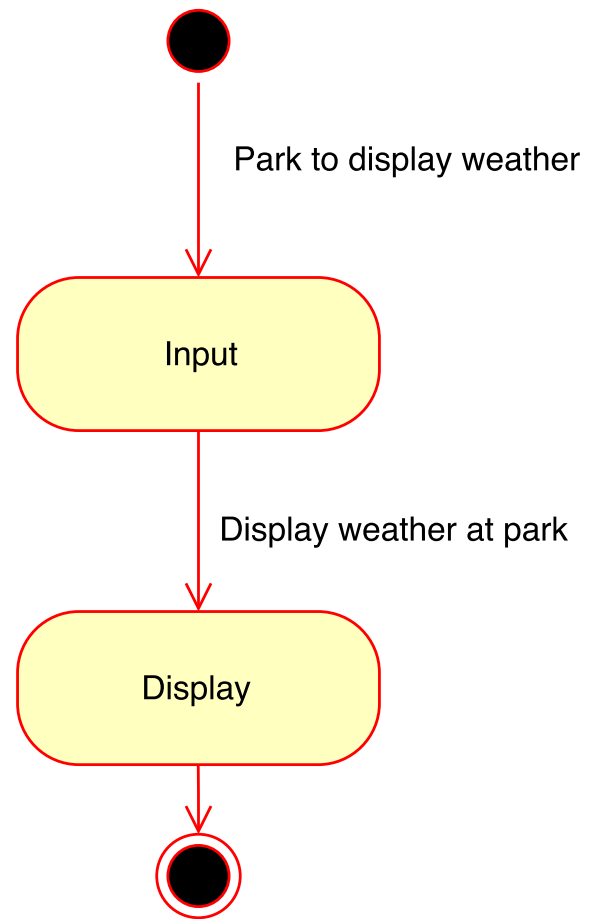


Figure 8: State diagram for the Weather Agent

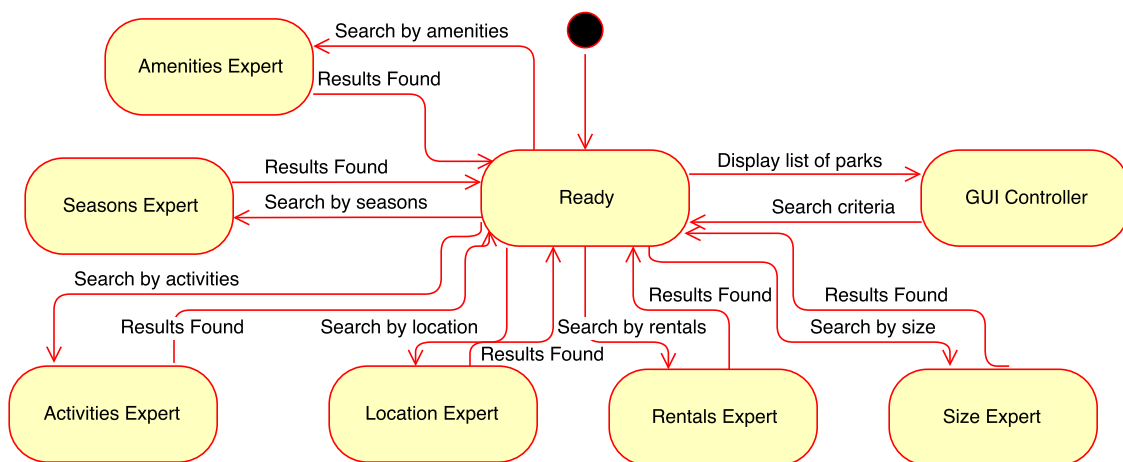


Figure 9: State diagram for the Blackboard

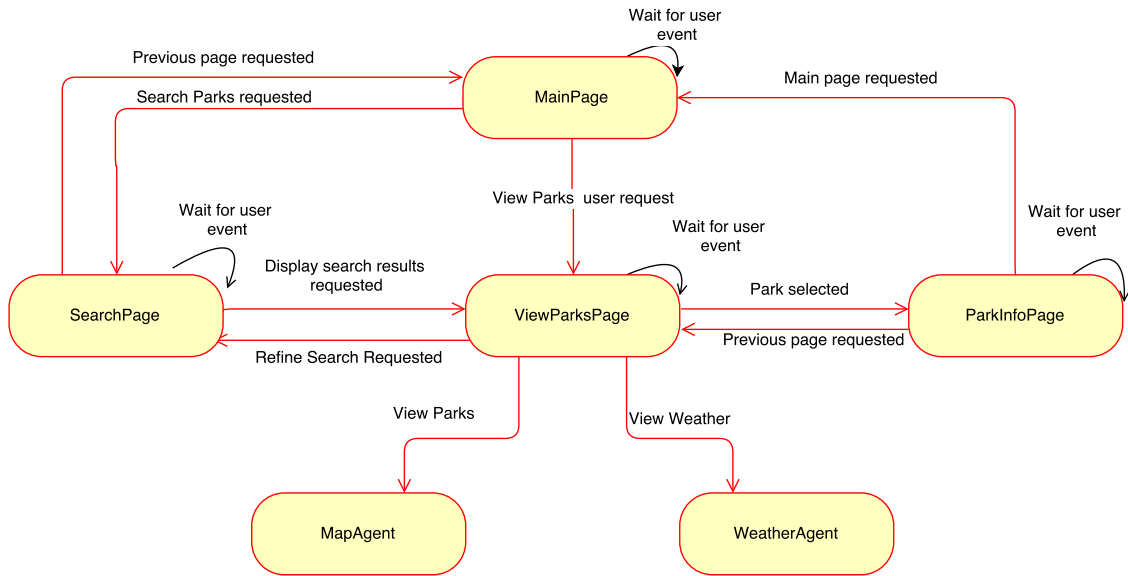


Figure 10: State diagram for the GUI Controller

3 Sequence Diagrams

This section should provide a sequence diagram for each use case of your application.

4 Detailed Class Diagram

In this section the class diagram for each main package of the parkFinder app will be displayed individually, then they will all be combined into one large class diagram.

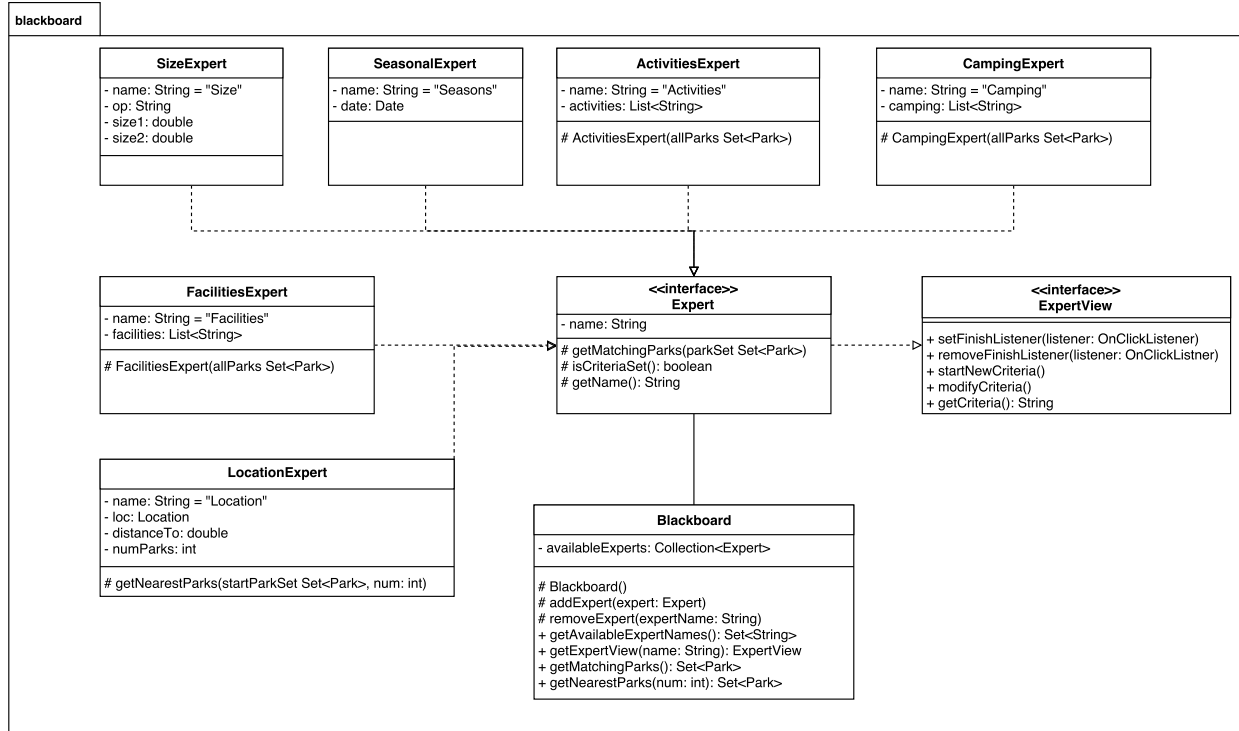


Figure 11: Class Diagram of the blackboard package

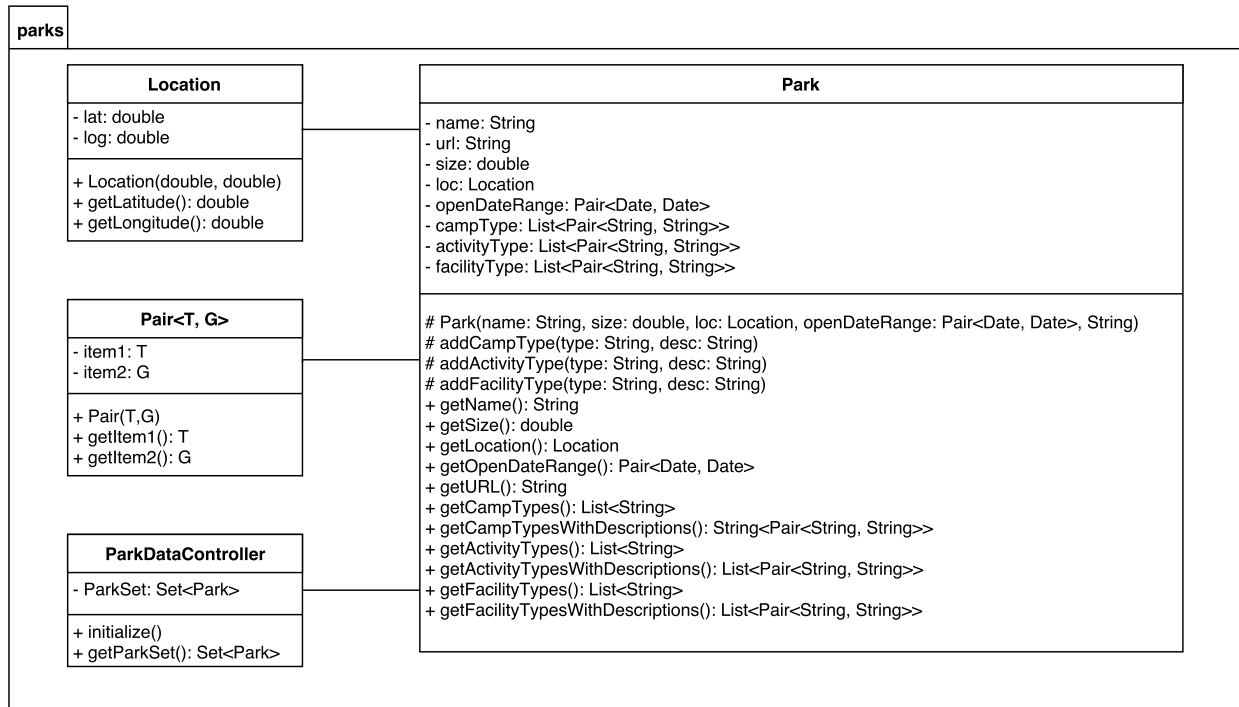


Figure 12: Class Diagram for the parks package

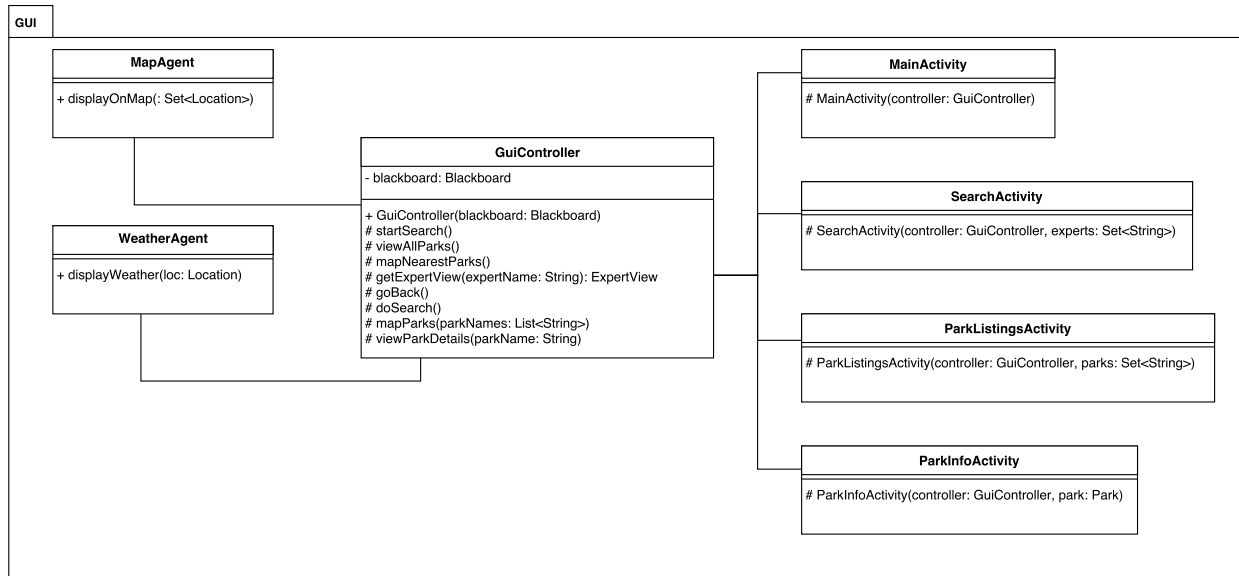


Figure 13: Class Diagram for the gui package

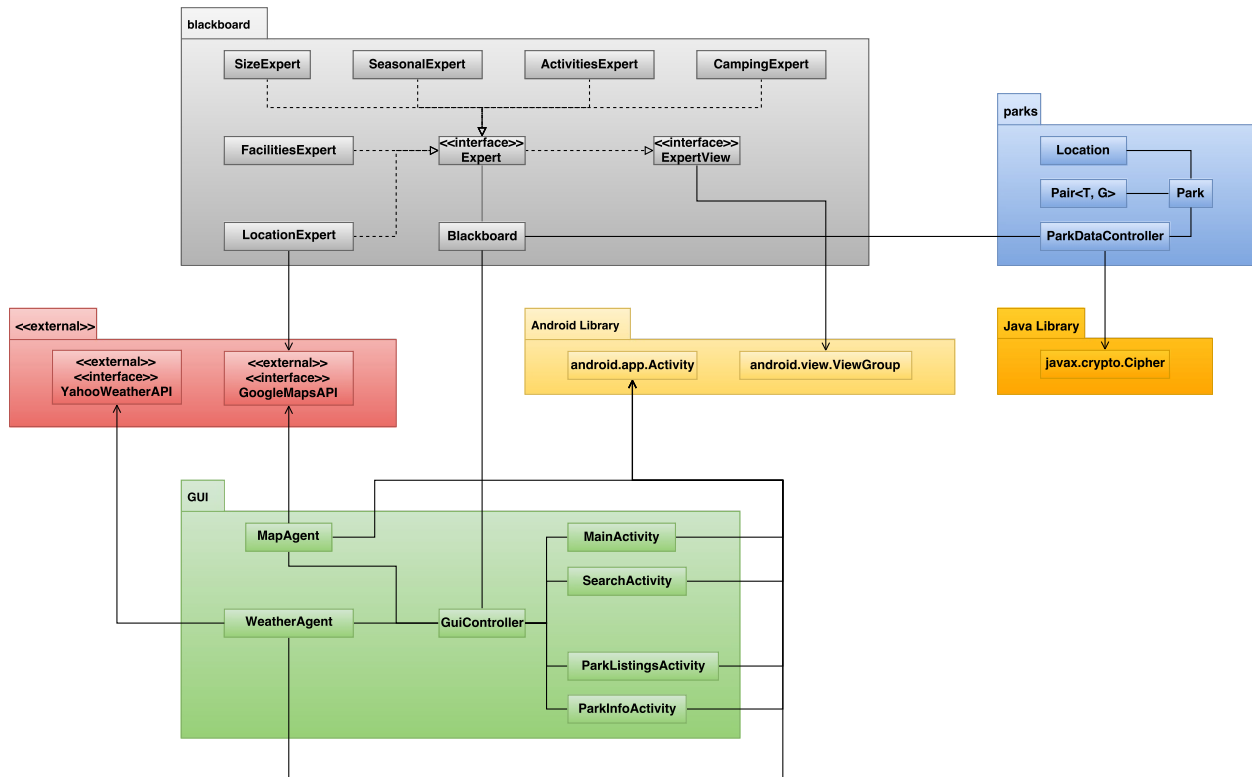


Figure 14: Class Diagram for the entire ParkFinder App

A Division of Labour

Contributions	Name	Signature
Section 3	Abdul Ahad	
Section 1	Salma Belal	
Section 2	Josh Chatten	
Section 2	Nathanael Jordan	
Section 4	Robert Stuart	