Bus Ticket/Seat Reservation

Object Design

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OBJECT DESIGN DOCUMENT

# Introduction

This Object Design Document (ODD) defines the object-level design of the app to be developed. It is based on the initial concept of the MVC architecture, proposed in Android App development strategy.

## Object Design Trade-offs

In the ODD, we will define the trade-offs made by our team, interface documentation

guidelines we have followed, packages, file organizations of the code, classes and interfaces used in the code. We had to do some certain trade-offs in our project, since a project cannot be “Fast, Good and Cheap” all together. In our project, we have done the trade-off as being “Good” and “Cheap”. Being cheap is a must, since this is a student project. Being “Good” is as all the functionalities described in RAD must work properly. Other trade-offs we have made are:

- Buy vs Build : Our software project is built in android studio, and we are coding and

developing the code together with our team.

- Memory space vs response time : Response time focused to be not take a very long

time, and more memory space can be used for faster response time.

-Internet Connection Required: The project need internet connection in order to complete the application task such as login, add-delete-update information on tables and database.

-Less Energy Consumption: Since our app is for Mobile Phones, the battery is an issue. For that reason we cannot implement complex text/speech or location services.

## Interface Documentation Guidelines

There are a list of rules we have applied in our developer team so we can understand and

develop the code written (individually) together easier, and make it more readable.

These rules are:

- Buttons are labeled as “<ActivityName>Button” for onClick events

- Classes are named with function name for instance; AddTripActivity, SignUpActivity etc.

- Methods are named with verb phrases, fields, and parameters with noun phrases.

- Start and End of certain functions are shown in comment lines.

- Since we worked with Parse, every pushes ands posts to Parse Server are came with some callback functions including exceptions.

## Definitions, Acronyms, and Abbreviations

ODD – Object Design Documentation

RAD – Requirement Analysis Documentation

SDD - System Design Document

ACTIVITY – An activity represents a single screen with a user interface just like window or frame of Java.

UI – User Interface

PARSE SERVER – Parse Server is an open source Backend-as-a-Service(BaaS) framework initially developed by Facebook. The platform now has an active and robust community of fanatical developers who constantly innovate and strive to improve the already impressive and modular platform.

## References

RAD and SDD are taken as a reference.

https://www.back4app.com/product/what-is-parse-server is taken as a reference for developing Parse Server and using it as the server of the application.

Atıl Samancıoğlu- Android courses are taken as a reference for developing the android methods and applications.

Since there is no pre-existing system, we don't take any references from an existing system.

# Packages

Our project classes include Java,XML,Parse Query commands. XML is used for creating and designing the “view” part of the application. Java classes and activities are used for developing the “UI”, which is the “controller” side of this application. Java Android Library is used on the application development. The “model” side is the database, which is imported in the project, “build.gradle Scripts”. PARSE server database system is used for the project and the tables of the project exists on the PARSE Server “www.back4app.com”.

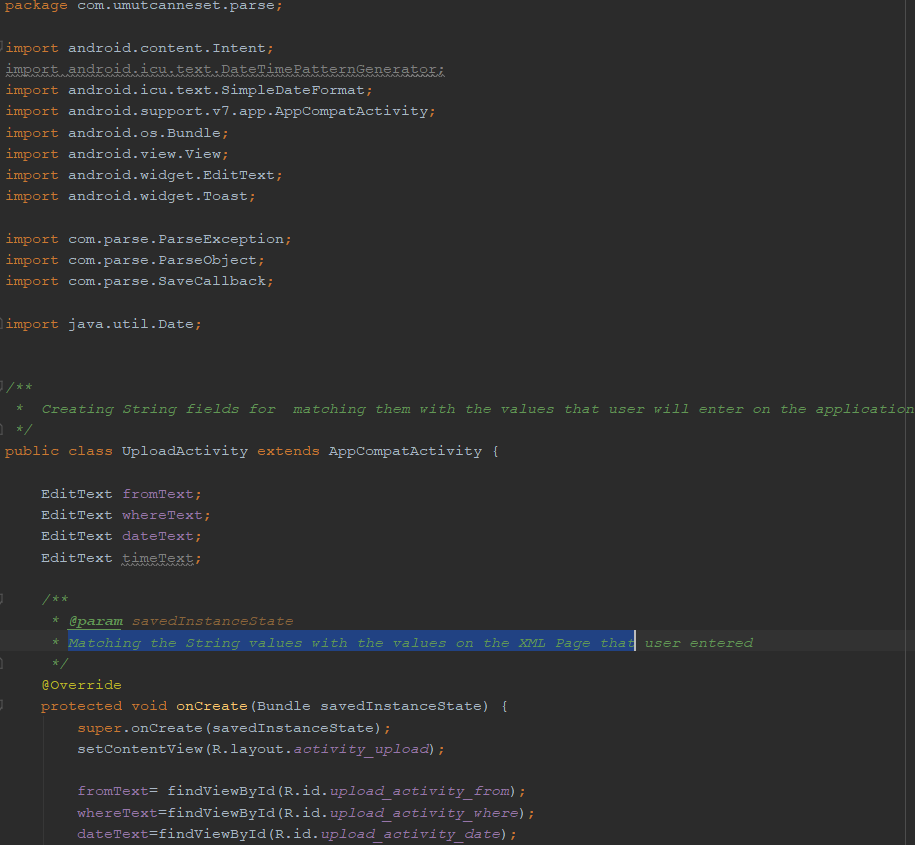
1-Images: All of the images are located in the directory “drawable”.

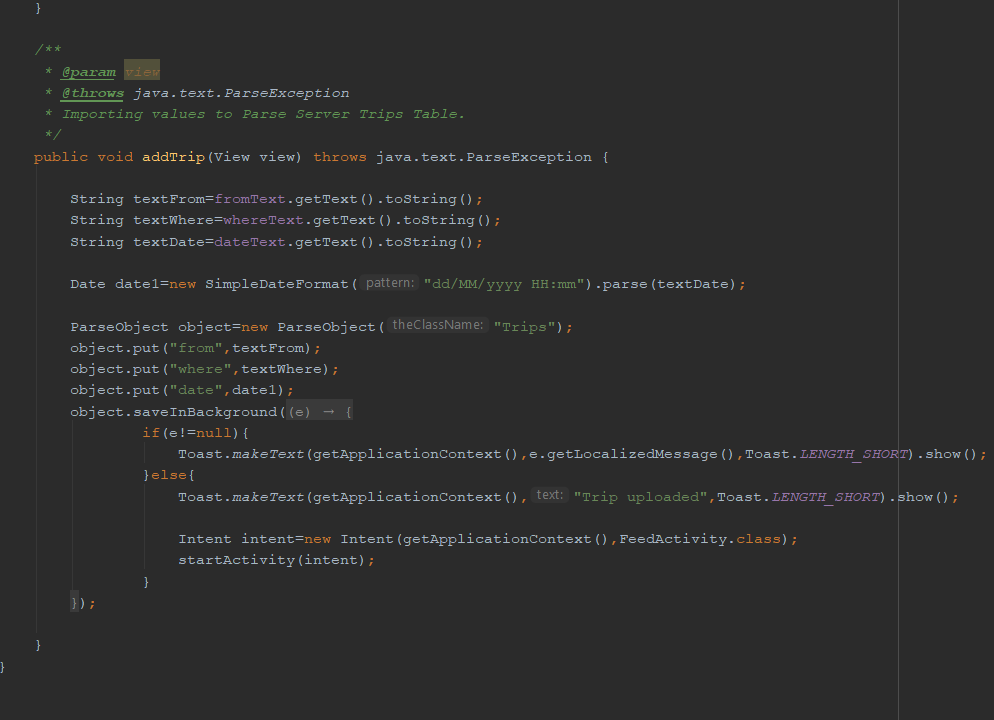
2-Classes: All activities are existed on Java.TrustBus package.

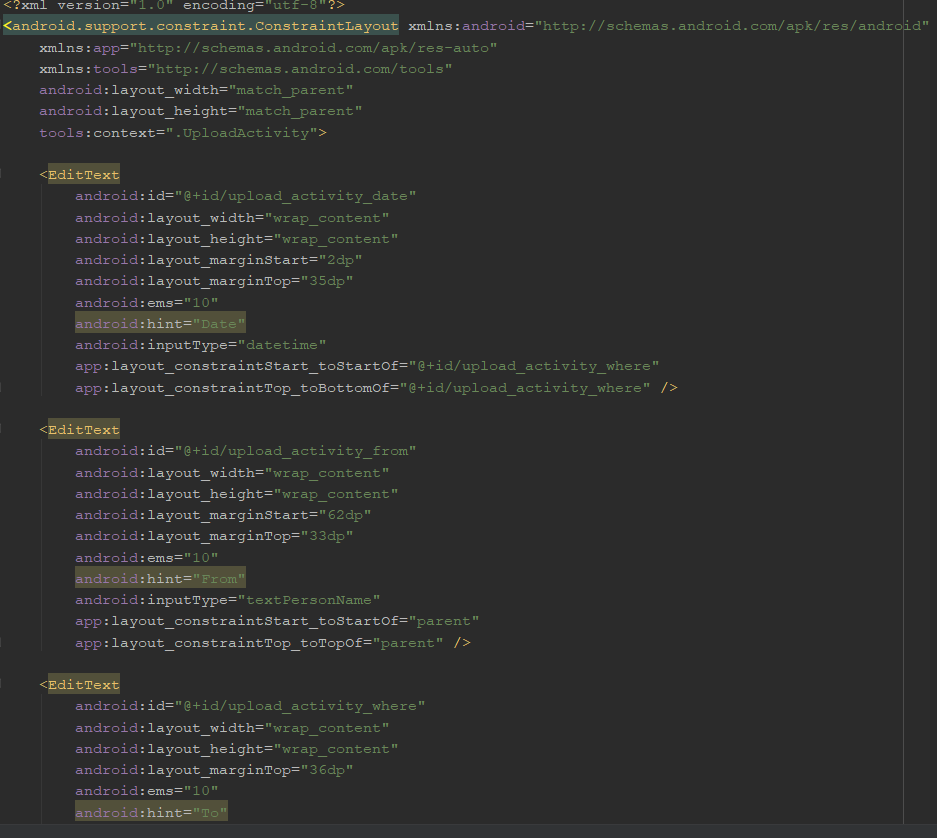
3-View: All the views are located in the layout folder.(XML Files) Also all of the classes are defined on android-manifest XML file.

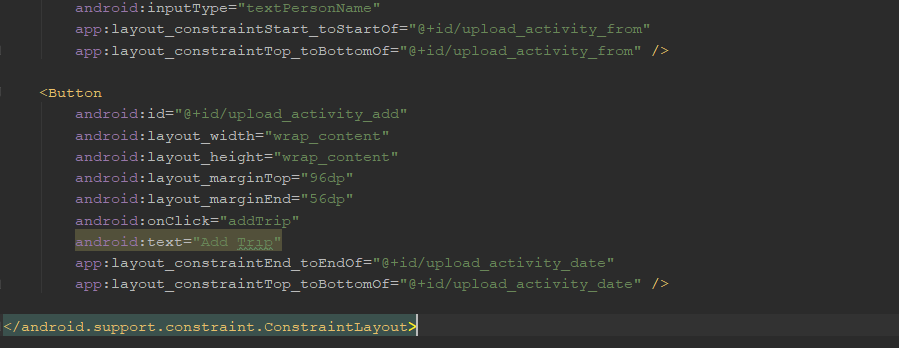
# Class Interfaces

Add Trip

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