

Design Specification

Group 12

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1 INTRODUCTION

2 DECOMPOSITION DESCRIPTION

2.1 Programs in system

2.2 Significant classes in Program 1

2.2.1 Tour

```
public class Tour {
```

```
    private String name;
    private Location[] locations;
    private String description;
    private String longDescription;
    private boolean uploaded;

    /*
     * Return the JSON representation of this object.
     */
    public String toJson() {
        return null;
    }

    /*
     * Add a location to the end of the list of locations.
     */
    public void addLocation(Location location) {

    }
}
```

2.2.2 Location

```
public class Location {
    private String name;
    private float latitude;
    private float longitude;
    private Image image;
    private String description;
    private int time;

    /*
     * Return the JSON representation of this object.
     */
    public String toJson() {
        return null;
    }
}
```

2.2.3 TourUploader

```
public class TourUploader {
    private Tour[] tours;
```

```
        /*
        * Upload the tours to the server.
        * Return true if the upload was successful.
        */
        public boolean upload() {
            return false;
        }
    }
```

2.3 Mapping from requirements to classes

This table shows each functional requirement that must be met, and which class provides its operation. This will ensure that all requirements are covered, and show the impact that changes to the design may have.

Table 1: Table mapping requirements to classes

Functional requirement	Class providing requirement
FR1- Startup of software on Android device	HomeActivity
FR2 - Providing info about the whole walking tour	Tour
FR3 - Adding locations to the walking tour	TourCreatorActivity
FR4 - Adding photos to the walks	TourCreatorActivity
FR5 - Cancelling walks	TourViewer
FR6 - Sending the walk to the server	TourUploader
FR7 - Switching from the WTC	HomeActivity
FR8 - Trying out a created walking tour	
FR9 - Saving data on server	

3 DEPENDENCY DESCRIPTION

3.1 Component Diagrams

3.2 Component Diagrams for Program 1

3.3 Inheritance Relationships

4 INTERFACE DESCRIPTION

4.1 Class 1 interface specification

5 DETAILED DESIGN

5.1 Sequence diagrams

5.2 Significant algorithms

5.2.1 Length of tour

5.3 Significant data structures

6 REFERENCES

7 APPENDICES

8 DOCUMENT HISTORY

Version	CCF No.	Date	Changes made to Document	Changed by
0.1	N/A	2013-11-25	Initial creation	LPS1
0.2	N/A	2013-12-04		LOT15