**Fi-Ware Social Proximity App**

Design Document

Joshua Eisikovits: C00156665

Project Supervisor: Dr Chris Meudec

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# Introduction

Purpose

The purpose of the design document is to explain how the Fi-Ware Social Proximity App should work. The document is a continual of the functional specification which described what the app should be able to do, therefore this document looks at the functionality provided by the functional specification and describes in detail with the use of Unified Modelling Language Diagrams.

This document should act as a blueprint for any developer to go ahead and develop this application based on the provided information.

Scope

This document contains complete description of the design of the Fi-Ware Social Proximity App. The document aims to describe each component of the application. The document is intended for developers of the application. It defines the architecture, use cases, data design and user interface design. The application will be developed according to the contents of this document. However changes throughout the duration of the project may occur.

# Context Diagram



# System Architecture

[Ref [1]](#h.r4tm3tkl51qn)

The Fi-Ware Social Proximity Application will be developed using the model-view-controller architectural design pattern, which is the pattern used for developing Android applications. The model is the data, the view is the window and the controller is the glue between the two taking the data and presenting it to the view. The diagram below illustrates the Model-View-Controller pattern.

# Data Design

# Data Description

The Fi-Ware application data will consist of user profile data, event organisers’ data, sports, food and drink and music event data.

Data within the tables will be related to each other through the use of primary keys and relationships.

# Data Dictionary

The above data design diagram can be clarified as follows.

# User Profile Table

|  |  |  |
| --- | --- | --- |
|  Column Name | Data Type | Description |
|  id\_user\_profile | INT (Primary Key) | Auto generated integer value to hold user id.  |
|  anon\_User\_Name | VARCHAR(45) | Up to 45 alphanumeric characters for anonymous user name |
| longitude | DECIMAL(10,8) | Longitude coordinates for the position of the current user |
| latitude | DECIMAL(10,8) | Latitude coordinates for the position of the current user |
|  current\_Interest | VARCHAR(45) | Up to 45 alphanumeric characters for users current interest |

# Event Organisers Table

|  |  |  |
| --- | --- | --- |
|  Column Name | Data Type | Description |
|  id\_eventorganisers | INT (Primary Key) | Auto generated integer value to hold event organisers id.  |
| login  | VARCHAR(45) | Up to 45 alphanumeric characters for anonymous login. |
| password  | VARCHAR(45) | Up to 45 alphanumeric characters for password. |
| email  | VARCHAR(45) | Up to 45 alphanumeric characters for event organisers email address.  |

# Sports Event Table

|  |  |  |
| --- | --- | --- |
|  Column Name | Data Type | Description |
|  id\_sportEvents | INT (Primary Key) | Auto generated integer value to hold event organisers id.  |
| name | VARCHAR(45) | Up to 45 alphanumeric characters for sports event name.  |
| longitude | DECIMAL(10,8) | Longitude coordinates for the position of the sport event.  |
| latitude | DECIMAL(10,8) | Latitude coordinates for the position of the sport event.  |
| date | DATE | The date of the sport event. |
| event\_photo | MEDIUMBLOB | The logo of the sport event.  |
| createdBy | VARCHAR(45) | Will be used to hold the (session) login id of the user who created the event |
|  event\_organiser\_id\_eventorganisers  | INT  | The relationship field between the sport event table and event organiser table.  |

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# Food and Drink Events Table

|  |  |  |
| --- | --- | --- |
|  Column Name | Data Type | Description |
|  id\_foodDrink\_events | INT (Primary Key) | Auto generated integer value to hold event organisers id.  |
| name | VARCHAR(45) | Up to 45 alphanumeric characters for food/drink event name.  |
| longitude | DECIMAL(10,8) | Longitude coordinates for the position of the food/drink event.  |
| latitude | DECIMAL(10,8) | Latitude coordinates for the position of the food/drink event.  |
| date | DATE | The date of the food/drink event. |
| event\_photo | MEDIUMBLOB | The logo of the food/drink event.  |
| createdBy | VARCHAR(45) | Will be used to hold the (session) login id of the user who created the event |
| event\_organiser\_id\_eventorganisers  | INT  | The relationship field between the food/drink event table and event organiser table.  |

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# Music Events Table

|  |  |  |
| --- | --- | --- |
|  Column Name | Data Type | Description |
|  id\_foodDrink\_events | INT (Primary Key) | Auto generated integer value to hold event organisers id.  |
| name | VARCHAR(45) | Up to 45 alphanumeric characters for food/drink event name.  |
| longitude | DECIMAL(10,8) | Longitude coordinates for the position of the food/drink event.  |
| latitude | DECIMAL(10,8) | Latitude coordinates for the position of the food/drink event.  |
| date | DATE | The date of the food/drink event. |
| event\_photo | MEDIUMBLOB | The logo of the food/drink event.  |
| createdBy | VARCHAR(45) | Will be used to hold the (session) login id of the user who created the event |
| event\_organiser\_id\_eventorganisers  | INT  | The relationship field between the food/drink event table and event organiser table.  |

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# Use Case Diagram



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# System Sequence Diagram

# Login System Sequence Diagram

# CRUD Profile System Sequence Diagram



## Event Organiser Register System Sequence Diagram

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## Create Event System Sequence Diagram



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## References

### Ref [1]

Bogotobogo.com, 'Design Patterns: Model View Controller (MVC) Pattern - 2015'. N.P., 2015. Web. 11 Apr. 2015.