**Software Engineering Group 11**

**SE.11.PP.02**

**Project Plan - Overview**

Author: Tom Raikes (tor10) & Aled Davies (add20)

Config Ref: SE.11.PP.02

Date: 2014-10-20

Version: 1.0

Status: Draft

Department of Computer Science

Aberystwyth University

Aberystwyth

Ceredigion

SY23 3DB

Copyright © Aberystwyth University 2014

CONTENTS

1. INTRODUCTION................................................................................................. 3

1.1. Purpose of this Document................................................................. 3

1.2. Scope................................................................................................. 3

1.3. Objectives.......................................................................................... 3

2.1 Client ……………..…………….................................................................................. 4

2.1.1 Field Entry …................................................................................................. 4

2.1.2 Field History……………...……........................................................................... 4

2.1.3 Upload…....................................................................................................... 4

2.1.4 Settings......................................................................................................... 4

2.1.5 Model………………………………………………………………………………...……….………….. 4

2.1.5.1 Fields…………………………………………………………………………………………………….. 4

2.1.5.2 Config……………..……………........................................................................... 4

2.1.6 Local Database…........................................................................................... 4

2.2.1 Request Handler……………..……………............................................................. 4

2.2.2 Model…........................................................................................................ 4

2.2.2.1 Species..…………….…...……........................................................................... 5

2.2.2.2 Recordings……………..……………................................................................... 5

2.2.2.3 Field Reserves…......................................................................................... 5

2.2.2.4 Species Occurence……………...……............................................................... 5

2.2.3 Update Handler……………..…………….............................................................. 5

2.3 Web……………................................................................................................... 5

2.3.1 Record Browse……………...……....................................................................... 5

2.3.2 Record View…………….................................................................................... 5

2.4 Physical DB……………...……................................................................................. 5

1. Introduction
   1. Purpose of Document

This is an individual part of the final project plan, this is being kept as a separate document to allow for version control and drafting of this particular section.

* 1. Scope

This document aims to be an overview of the architecture of the final system that the group is building.

* 1. Objectives

This document covers:

* The client (i.e android application) structure.
* The server structure.
* The database structure
* The webpage structure.

**Overview**

**2.1 Client**

* Using Android – version 4+
* Describes entirety of the android app

2.1.1 Field entry

* Screen to enter new data – directly interfaces with the model where data is stored

2.1.2 Field recall

* Screen to recall previous entries – also accesses the same ‘fields’ model

2.1.3 Upload screen

* Field item is added to queue ready for upload to database. Also browse records in queue and choose to upload items to the server

2.1.4 Settings

* Interfaces with the local config model, allows users to configure the app to their preferences

2.1.5 Model

* Local content on the device, which ‘can’ be sent to the database

2.1.5.1 Model - Fields

* Locally stored entries saved on the device ready to be uploaded to the database.

2.1.5.2 Model – Config

* Interfaces with settings, stores user preferences.

2.1.6 Local database

* Stored on the device which can then be sync’ed with the server when network coverage becomes available

**2.2 Server**

* LAMP server to handle the application communication with the database (PostgreSQL?)
* Does not actually contain a database (on a separate machine) but does interface with it

2.2.1 Request handler

* Deals with communication between the client and server
* Can send data back to the client to say the data has been added to the database
* Also deals with erroneous data

2.2.2 Model

* Converts object data from client to database-readable statement
* Gives that data to the update handler

2.2.2.1 Model – species

* Sorts data related to species

2.2.2.2 Model - recordings

* Sorts data related to recordings

2.2.2.3 Model – reserves

* Sorts location data and reserve data

2.2.2.4 Model species occurrence

* Sorts data related to species occurrence

2.2.3 Update handler

* Interfaces between server and database
* Takes records from the model (2.2.2)
* Sends data back to the client to say that data has been written to the database

**2.3 Web**

* Uses php to handle database communication and to display records on the web app
* Uses HTML and CSS to make things look pretty

2.3.1 Browse

* Displays records from database
* Allows searching via ‘omnibox’ via id (primary key in each table)

2.3.2 Record view

* This will give a detailed view of a particular species

**2.4 Database**

* PostgreSQL(?) database where the data will be stored

**REFERENCES**

N/A

**DOCUMENT HISTORY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | CCF No. | Date | Changes made to document | Changed by |
| 1.0 | N/A | 20/10/14 | Document Created and Structured | add20 |