Software Engineering Group 11

SE.11.PP.02

Project Plan - Overview

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1. <u>Introduction</u>
   1.1. 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.

   1.2. Scope

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

   1.3. 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
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