

A Design Approach to our App

Final App Project - Mobile Applications Development

Revision 01

Where to start from?

Brainstorming Session in morning class

Introduction

The brainstorming session identified a number of coding problems to solve and a number of approaches to tackling the project. These are listed below.

We then decided to prototype these coding problems in class or over the coming week or two.

CODING problems to solve

Random function

- develop a simple prototype - have a sequence of 4, 6, 8, 10 numbers. We could then flash 4 images or buttons, etc in that sequence.

Flashing images/buttons.

Get four buttons/images up in a prototype and see if they can be made flash or change colour in some sequence.

Get the accelerometer working to match a sequence. N S E W

- setup a known hardcoded sequence - N W E S N S S N
- see does the app match this

Database for the hi scores

- list the top 5. - 'LIMIT'
- Check if score is in the top 5
- insert the name / score in the hi score list
- if current score is in the top 5, we need to ask for name and insert it into the database

Approaches to the project

APPROACH - develop a skeleton model

Make a skeleton project with 4 activities and pass the data between them (putExtra) - Add the database framework
- navigate back to first screen from the 3 or 4th screen?

APPROACH - research to choose a professional UI

Focus on the UI - getting it looking professional requires work.
- research online for inspiration for the UI - needs to be professional looking.
- decide custom components - not just circle buttons or images.
- something cool
- do up some prototypes

APPROACH - scheduling the project - how best to use our time to work on it
over the time period

- Heavy workload - work on the project in a burst
- To work in small but targeted chunks

Database design

Database name

Database on SQLite

- project3game.db

Tables

- HiScores

Columns of table?

- scoreID - primary key - int - autoincrement - unique
- Name (TEXT)
- score (INT)
- Date (long - DATE format)

Prototype Approach

DO up a database prototype with this running

- log version we did in class last week
- insert
- top 5 listing
- check if current score is in the top 5.

```
CREATE TABLE hiscores (  
    score_id INTEGER PRIMARY KEY,  
    game_date TEXT NOT NULL,  
    player_name TEXT NOT NULL,  
    score INTEGER NOT NULL  
);
```

Outcome of prototype

Does it work?>. What was implemented?