**Project Plan**

**Question:**

**Analysis on the rise of expenditure on gym membership and supplements to aid a portable personal trainer application.**

**Introduction:**

*Aims* describe the broad purposes of the project, and state in general terms what your are setting out to do.

**Aims:**

* Aim is to be able to make a prediction on whether people have joined the gym because of the social aspect or because of the awareness of a healthier lifestyle. This will give a clear indication of what has caused the rise of increased expenditure on gym memberships and supplements.
* This study will help provide detailed information within the application but also give a better idea of what the market actually wants. This will help develop the application into something that is desired by the consumer market.
* Conducting research into the fields of; organisations (e.g. Life Fitness), society and the economy, I believe there could be a form of correlation, hence leading to a reasoning behind the rise in money spent on gym memberships and supplements. The data generated from the research will help create an application that people actually want.
* The main IT aim is to produce a Portable Personal Trainer Application.
* The Portable Personal Trainer Application should be compatible with most devices.
* The Portable Personal Trainer Application will act as a ‘personal trainer’. The application will teach users how to perform the exercises in a safe way and recommend the amount of repetition and sets.
* The application will have sections that can recommend users standard facts. For example, it can suggest to the user that they should be getting a minimum 7hr of sleep a night.
* The application can also keep track of the user’s diet and suggest a diet plan. Users can input what they are eating and the application will act as a diary. The application can also recommend certain foods for the goal, e.g. handful of nuts instead of a chocolate bar.
* The application may be available in different languages.
* The Portable Personal Trainer Application should contain videos and pictures of exercises. These visual images will be made from scratch to avoid copy right issues.

*Objectives* describe concretely how the aims are going to be met; it should be possible to assess concretely/quantitatively whether or not the (list of) project objectives have been achieved.

**Objectives:**

* Coding in Java to create the application.
* Design aspects. Must design the application so it is user friendly and gains good user experience. (These go hand in hand.)
* Make an application that is secure with things like passwords. This means personal information can be protected.
* Designing a simple user interface so it is not too complicated to use as there will probably be no form of teaching users how to work the application. Links with User Experience.
* The application has to be compatible with several leading mobile phones out there. Either Android or IOS based.
* Primary research will be undertaken; e.g. questionnaires to the public, questionnaires to gym members. This will help generate information to put into the application but also show what users really want.
* Secondary research such as previous studies etc. All will be used to help the application and show what users really want. Also it can show differences from now and a few years back e.g. a 2010 study.

**Requirements:**

**Challenges and Originality:**

* Creating an application that is compatible with several devices/software e.g. Android or IOS.
* Conducting primary research as no budget has been provided.
* Coding in Java to create the application. Will require personal study as I have never created an application but also not the strongest coder.

**Software Requirements:**

The software will be the portable personal trainer application.

Requirements:

* User inputs data e.g. Weight, Height.
* Application keeps track of things like a diary.
* Provide information on recommended daily calorie intake.
* Ask user what is their goal e.g. lose weight, gain muscle mass etc.
* Workout ideas with pictures explaining the exercise.
* Provide a recommended diet for the goal and user preferences e.g. if user is allergic to nuts, recommend things excluding nuts.
* Have a section of other useful information such as amount of sleep etc.
* (Keeping in mind) most will have to be guidelines to stay within regulations.

Additional Requirements if the above are met:

* Provide user with estimate time to achieve goal, if routine/diet followed.
* Videos to show how exercises work.
* Ratings on each exercise to show what other users think.
* Change the language of application.

**Planning:**

**Timetable Semester 1:**

Project Deadlines:

* Term 1: 26th September – 9th December
* Plan: 20th October
* Proto-type Demo 3%: 28th November – 2nd December
* Interim Report and Career Plan 7%: 8th December

**Timetable Semester 2:**

Project Deadlines:

* Term 2: 9th January – 24th March
* Interview with Second Marker 5%: 27th February – 3rd March
* Term 3: 1st May – 23rd June
* Dissertation 25%: 4th May
* Software System 15%: 4th May
* Viva with Presentation 10%: During examination period.

**Section Percentages:**

* Plan: 0%
* Proto-type Demo: 3%
* Interim Report and Career Plan: 7%
* Interview with Second Marker: 5%
* Dissertation: 25%
* Software System: 15%
* Viva with Presentation: 10%
* Technical Achievements: 30%
* Effort: 5%