**Main Project Question:**

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

**26th September – 5th October**

Start of term. Organise time to see supervisor and clarify the outline of project.

Learning how to use SVN correctly and submit the work. Have chosen to use GitHub on a day to day basis and SVN only when submitting work.

**5th October – 18th October**

Keep conducting research.

Planning the project plan. Need to write what the aims and objectives are.

Try and define clearly the plan!   
Make a time scale for all the activities.

Talked to my supervisor and was told to narrow it down and be more specific. Some of my objectives and aims overlapped with requirements. Also had to add sub headings into requirements to make it easier to locate each part.  
Must start compiling all of this into one document and prepare this for submission.

**18th October**:

Keep conducting research.  
Start planning out the design of the application. Need to have an outline of what I am aiming to achieve.   
Set a plan for what the prototype will include and why. Must make sure it is enough for the prototype.

**Need to draw up:**

**Project Backlog**:  
project goal, system features and key scenarios in Gherkin notation  
  
**Use Case Diagram:**  
Each use case has to be assigned a priority aligned with the system features, the project plan and the risk assessment.

**Component Diagram:**

A special kind of **diagram** in UML. The purpose is also different from all other **diagrams** discussed so far. It does not describe the functionality of the system but it describes the **components** used to make those functionalities.

Initial Risk Assessment:  
identification and brief description of the top 10 risks faced by the project; an assessment of the likelihood of their occurrence and their potential impact leading to a prioritization; measures for risk avoidance or mitigation, including responsibility and deadlines. A guide with a template is available from the course webpage

**Detailed Software Architecture:**  
Are the main components of the software architecture considered - domain model, data model (JPA annotations), repository layer, controller layer, security layer, views? Is their internal structure specified at the right level of detail? Is the object design consistent with the software architecture? Are the interfaces consistent with the software architecture? Have they been implemented in the object design model? Regarding the data management strategy: Are the relevant data formats explained? Are persistent objects identified? Is the choice of database management system and persistence method justified? Regarding the security layer: Does the access control strategy include how authentication is implemented? Are the data structures to be used to implement access control been identified and specified and justified? Where in the 1 CO2015 Milestone description system will they be implemented? Is the access control strategy aligned with the object design?

**Detailed Feature Specification**:  
Define Gherkin features and scenarios for each layer. These usually decompose system features into more specific features, which are dependent on the software architecture chosen. (Note the Gherkin features for the first task for are the acceptance tests that relate to the high level, business requirements. The features for this task test at a more specific level

**Design Documents:**  
All design object models from other worksheets updated to reflect decisions made during the project. Summary of the key design decisions that were made by the group, and reflection on how well they worked. Summary of what was done (or should have been done) when designing the application to help with performance and security (any sense of performance and security that you think is relevant to this application)

**Useful Information:**

**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%