HSC SDD 2015 Major Project

**PERSONAL REFLECTION**

Reflect on your learning, achievements and problems from your project

1. Name: Jacob Greenberg
2. Outline the problem/need your project addressed

It can be an annoyance running an education establishment and having to keep track of large amounts of paper and the statistics of all the students. My app decreases the need of these resources, by introducing a convenient paperless system.

1. Outline whether you chose a good project

Yes, I think what I chose was a good project. It was doable, and a more commercial environment would have produced a totally marketable final product. Personally however, utilities don’t really interest me and I would have liked to have taken a more personal interest approach to the assignment, as opposed to just trying to fill out criteria.

1. Identify the most successful aspect to your project

Without a doubt, the dynamic charting. That really took some effort, and brings a whole level of uniqueness to the project.

Identify the greatest achievement during the project

Implementing the ability add marks, have them dynamically graphed and be able to undo them. As well as each student having a unique graph and having the graph stored.

1. List 3 pieces of knowledge did you gained/learnt during the project

* How to delete the last item in an array
* How to use ChartJS
* AngularJS local storage.

1. List 3 skills did you gained/learnt during the project

* How to take a structured approach to development
* How to style effectively with a colour wheel.
* Jquery mobile formatting.

1. Outline the skills you think are most important in order to complete the project

* Patience
* Discipline
* Peristence

Identify 2 of the major challenges you had with the project and outline how these overcome (or not overcome)

Getting the marks to store in a database and then be plotted on a graph was difficult. Use peer review and concepts to overcome it.

1. Discuss the statement “My planning was successful!”

My planning was successful, I sought out to develop an app that a tutor could use to track the grade and lesson time information of a student and I did just that. Some parts of it may be buggy, but with my planning I had a clear goal of what I needed to get done.

1. Outline what you would do differently/the same if you had to do the project again.

I would work more consistently, as opposed to taking big chunks out of it and long breaks. That way I wouldn’t have to relearn modules of code I had written prior and forgotten. I also would have increased my habit of intrinsic documentation.

1. Identify 2 things you would like to have known at the start of the project

I would like to have known how to use Ng-storage with a wider variety of data type specifically with arrays. I also would have like to have known the code libraries which Jquery mobile/Angular are more or less compatible with.

1. Outline some advice would you give to Preliminary students about to start the project

Just work consistently and the project will be a breeze, if you work in big chunks and leave things till the last minute. As well as not debug as you go, and intrinsically document your code. You are just shooting yourself in the foot.

**Feedback on the teaching and support for the project**

Please rate the following questions based on the following criteria

(1 Strongly Agree) - (2 Agree) - (3 Neutral) - (4 Disagree) - (5 Disagree Strongly)

1. The project was very worthwhile as a learning experience.

5

* Comments (negative or positive)

I picked up a lot of information, and coding technique.

1. The Project handouts and marking schemes were fair and easy to understand

3

* Comments (negative or positive)

Wasn’t fantastic to be honest, a tad ambiguous at some points and the docs template didn’t always align with it.

1. There was enough support along the way for the project

5

1. Comments (negative or positive)

Definitely, but not all of it came from the teachers. Most of it came from the more proficient programmers in the class.

1. The skills needed to complete each stage of the project was covered in class

2

1. Comments (negative or positive)

I thought it was very self-taught, but I don’t really have an issue with that.

1. The timing of each stage of the project was appropriate.  
   Project Specification– Dec (Term 4), Project Design – (late Term 2), Code, Exhibition & Documentation – (End Term 2).

5

1. Comments (negative or positive)

Yes, the timing was totally if not maybe even a little in excess.

1. Do you have any ideas that could be used for future projects?

Not any in particular, but the ease of local storage with Ngstorage brings about a whole host of possibilities.

1. Reflect on the syllabus **9.3 Developing a Software package**, to see what you have learnt. For each part of the “learn about” and “learn to” rate your knowledge and skills   
   (1 Outstanding) - (2 Excellent) - (3 Good) - (4 Developing) - (5 What?)

| Rate | Students Learn about | Rate | Students learn to: |
| --- | --- | --- | --- |
|  | **Designing and developing a software solution to a complex problem**   * defining and understanding the problem * identification of the problem * generation of ideas * communication with others involved in the proposed system * draft interface design * representing the system using diagrams * selection of appropriate data structures * applying project management techniques * consideration of all social and ethical issues * planning and designing * algorithm design * refined systems modeling, such as: * IPO diagrams * context diagrams * data flow diagrams (DFDs) * storyboards * structure charts * system flowcharts * data dictionaries * additional resources * Gantt charts * logbooks * algorithms * prototypes * selecting software environment * identifying appropriate hardware * selecting appropriate data structures * defining files * purpose * contents * organisation * defining records * defining required validation processes * identifying relevant standard or common modules or subroutines * using software to document design * identifying appropriate test data * enabling and incorporating feedback from users at regular intervals * considering all social and ethical issues * communicating with others involved in the proposed system * applying project management techniques |  | * define the problem and investigate alternative approaches to a software solution * evaluate the ideas for practical implementation * select an appropriate solution * produce an initial Gantt chart * use a logbook to document the progress of their project (see Course Specifications document) * document the software solution * generate a fully documented design for their project after communication with other potential users * use and modify a Gantt chart as appropriate |

| Rate | Students Learn about | Rate | Students learn to: |
| --- | --- | --- | --- |
|  | * implementing * converting the solution into code * systematic removal of errors * refining the data dictionary * including standard or common modules or subroutines * using software to refine documentation * creating online help * reporting on the status of the system at regular intervals * applying project management techniques * testing and evaluating * completing thorough program and system testing * completing all user documentation for the project * maintaining * modifying the project to ensure: * an improved, more elegant solution * all needs have been met * the software solution operates under changed environments or requirements * updating the software specifications and documentation to reflect the changes   **Whole project issues**   * project management techniques * social and ethical issues   feedback from users at regular intervals |  |  |

1. What areas of the syllabus do you need to study or support to ready yourself for the HSC Exam?

|  |  |  |  |
| --- | --- | --- | --- |
| Rate | Students Learn about | Rate | Students learn to: |
|  | Systems implementation  Implementing the software solution by:  • implementation  – production and maintenance of data dictionary  – inclusion of standard or common routines  – use of software to document design  – translating the solution into code  – creating online help  – program testing  – reporting on the status of the system at regular intervals  – applying project management techniques  – enabling and incorporating feedback from users at regular intervals  – completing all user documentation for the project  – consideration of all social and ethical issues  – completing full program and systems testing  • maintenance  – modifying the project to ensure an improved solution |  | • implement a fully tested and documented software solution in a methodical manner  • use project management techniques to ensure that the software solution is implemented in an appropriate time frame  • communicate effectively with potential users at all stages of the project to ensure that it meets their requirements  • ensure that relevant ethical and social issues are addressed appropriately |