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| edx+cmyk_50mmProject Activity Log | | | | | | | |
| Learner Name | | Ashwin Ahuja | |  | Learner number | 5501 |  |
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| Centre Name | | St Paul’s School | |  | Centre Number | 14627 |  |
|  | |  | | |  | |  |
| Unit Name | | Artefact Extended Project | |  | Unit number |  |  |
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| Teacher Assessor | | Dr Tomi Herceg | |  |  | |  |
|  | |  | | |  | |  |
| Proposed project title | | | User Friendly Secure Handheld Password Manager | | | |  |
| This form should be used to record the process of your project and be submitted as evidence with the final piece of work.  You may want to discuss:   * what you have done (eg, from one week to the next) * if you are working in a group, what discussions you have had * any changes that you have or will need to make to your plans * what resources you have found or hope to find * what problems you are encountering and how you are solving them * what you are going to do next | | | | | | | |
| Date | Comments | | | | | | |
| 14th September 2015 | **Activities Undertaken:** I have completed a number of SolidWorks tutorials in order to better my CAD abilities. I learnt about new tools such as Equations and am beginning to learn about Simulation. The tutorials completed were: Lofts, Surfaces, Advanced Design and Equations  I have also been researching a number of possible ideas, understanding how they might fit inside the purview of solving a problem and understanding whether the ideas were feasible to accomplish inside a term and a half. Additionally, in order to help visualise one of my ideas, and to test my SolidWorks abilities, I attempted to design a basic idea for a smart water bottle. My research also included whether other such products existed, and how they worked.  **Problems Encountered:** I realised that a couple of my ideas would be far too time-consuming and thus not a realistic goal for my project.  **Steps Taken to Overcome:** As well as discarding one idea, I began to consider the possibility of finding a smaller part of the other idea, thus making a more focussed project which could still be feasible.  **Plan for Following Week:** I hope to continue the research into my ideas and begin to choose one of them. I also hope to continue my learning on SolidWorks – especially learning to use the simulation features of the application. | | | | | | |
| 21st September 2015 | Activities Undertaken: Using the new tools offered by SolidProfessor, I began to explore the world of SolidWorks Simulation, by watching the first few videos. In addition, as part of homework, I continued to research what existed regarding my ideas, and how they worked, preparing a talk regarding them, learning from Dr Gardam’s presentation about what an effective idea would be. In addition, I attempted to continue to research the possible solutions to my problems, thinking about how I could in fact simplify my ideas, focusing on a specific part of the product, and researching and modelling that part in depth. I also completed a few more tutorials on SolidWorks, such as the animation tutorial, which would easily allow the user to see inside a complex product easily. Finally, I am also beginning to conduct some research on how to use EagleCAD, a ubiquitous software for Electronics Design (and Simulation), since my product would likely contain an element of electronics.  Problems Encountered: I faced a number of computer related issues, including a reinstallation of SolidWorks originally failing, before finally succeeding after a period of pain. Additionally, I struggled to find a good source of information for EagleCAD, which was both upto date and was comprehensive enough for me to gain a good understanding of a tool.  Steps taken to overcome: By following steps online, I was able to remedy the problem that I faced during installation. Additionally, after a period of research I found a Sparkfun tutorial online for EagleCAD which at least appeared to cover the basics effectively.  Plan for following week: Building off opinions of others in my class, and using research for the homework, I hope to reduce the number of possible ideas, finding which is the most feasible, whilst still being interesting for me, and challenging. Additionally, I hope to continue the tutorials for EagleCAD and SolidWorks. | | | | | | |
| 28th September 2015 | **Activities Undertaken**: In the theoretical taught lesson, we received a continuation to the introduction to Fluid Dynamics, and also an introduction to Mechanical Analysis, especially into the elasticity of materials – using Young’s Modulus, and how to find the statistics of different materials – using MathWeb.com. Additionally, I continued to research the existence of my problem, asking a few friends if they encountered similar ideas. I also received an introductory lesson on SolidWorks Simulation, using the SolidWorks Express package, and am currently completing a homework – which would begin to use the skills acquired. Finally, I completed the tutorial on EagleCAD and am currently experimenting, using the skills for CanSat as a preparation for the EP.  **Problems Encountered:** I was unable to access the SolidWorks Simulation tools on the student edition.  **Steps taken to overcome:** I was able to use the SolidWorks that exists on the computers in school to do my simulation homework, and experimenting with the tools.  Plan for the following week: I hope to continue the tutorials for Simulation in SolidWorks. | | | | | | |
| 5th October |  | | | | | | |
| 12th October |  | | | | | | |
| 19th October |  | | | | | | |
| 26th October |  | | | | | | |
| 2nd November |  | | | | | | |
| 9th October |  | | | | | | |