

Criterion B: Record of tasks

Task number	Planned action	Planned outcome	Time estimated	Target completion date	Criterion
1	Get IA scenario and client approved by the teacher	Specific scenario and client approved	15 minutes	16/Oct/2019	A
2	Initial interviews with client	Record of interviews	15 minutes	29/Oct/2019	A
3	Construct written introduction to Client's problem	A deeper understanding of the clients needs of a new system to enhance the quality of the planning and design of the solution system	2 days	31/Oct/2019	A
4	Interview Client for detailed account of new system specifics	To obtain a better understanding of the clients requirements	20 minutes	4/Nov/2019	A
5	Make a written description of the proposed system to solve the client's problem. This includes justification of the proposed product with its initial features	Present this to the client to see whether they approve	3 days	9/Nov/2019	A
6	Consult with client to develop the system by creating success criteria	Complete Success criteria to understand exactly what the system should be able to do (i.e features/functionality)	30 minutes	10/Nov 2019	A
7	Use interview knowledge to create use-case	Complete use-case and top-down diagrams	1 day	11/Nov/2019	B

	and top-down diagrams				
8	Create UML Diagram(s)	Complete before development to brainstorm on possible new ideas(may create multiple diagrams)	1 day	12/Nov/2019	B
9	Write important algorithms in pseudocode and flowcharts of an important algorithm	Complete Sorting and Searching algorithm in pseudocode and flowchart diagram	1 day	13/Nov/2019	B
10	Create Test Plan, data dictionary, GUI draft layout	Complete test plan for various variables and validations, from this, form a data dictionary, and a test layout for what the system may look like	2 days	15/Nov/2019	B
11	Create Entity Classes	Create the Person, Student, Teacher classes and encapsulate their variables.	30 minutes	17/Nov/2019	C
12	Code relationship between variables	This is an addition to the entity classes, in that this stage is where relationships such as Aggregation and composition relationships would be formed. Teacher has an ArrayList of Classes, etc.	1 hour	17/Nov/2019	C
13	Code Regression Neural Network	CRreate the model that inputs 14 data points and outputs a single number. The 14	2 days	19/Nov/2019	C

		inputs are 14 different grades, and the regression output is the predictive grade			
14	Code Softmax Neural Network	This algorithm is the algorithm that outputs the probability that the students attain each grade level. The planned outcome is to create a .h5 file which can be run to use model	2 hours	21/NOV/2019	C
15	Find Libraries to link Keras Neural Network Models in Java - this includes all dependencies	To implement python .h5 file in java, external libraries are required to do so, simply because the process of coding is easier. I wish to find all dependencies and include them in my project so I can implement my models in java.	4 hours	22/Nov/2019	C
16	Create Linear Regression Model Class in Java	To create a model that can input any amount of data, and find the line of best fit between them. I wish to have this as one of my prediction methods, and display the equation of line on a GUI LineChart	3 days	26/Nov/2019	C

17	Find application to create .FXML files for GUI	Using JavaFX, I wish to hand-code all GUI aspects. So, I only need an application to create the FXML files(layout) of the GUI. To find this application is my aim because I wish to use it in future	20 minutes	26/Nov/2019	C
18	Create Layout files for Create Account Page and Login Page	To create the layout of two pages of my GUI system, using Scene BUIlder. The drag and drop functionality of SceneBuilder (ONLY LAYOUT) will make this simple. Get used to the application	2 hour	27/Nov 2019	C
19	Code Controller Class for Login and Create Account pages.	Create a system for the user to Login, by validating that usernames exist, verifying that usernames match passwords, coding a storage system to store account details using Serialization. Get used to coding with java fx	2 days	30/Nov/2019	C
20	Create Teacher page	To further develop the system, - this includes coding the a method that updates all Labels and Chart data every time	1 Day	2/Dec/2019	C

		an action is performed.			
21	Code Graph on Teacher Page	The graph should display the trend of a specific student to help the teacher view their trend of grades.	1 day	3/Dec/2019	C
22	Change Student Entity class to include HashMaps	To improve the structure of code, hopefully to make future coding easier to conduct	1 hour	3/Dec/2019	C
23	Code Controller Class for Add Student and CreateClass and create .FXML files for pages to Add Students, Create classes.	Further Develop the system	2 hour	8/Dec/2019	C
24	Code controller class for Student page and Create .FXML for Student page for student to view his grades		1.5 hours	8/Dec/2019	C
25	Create Data to train the Regression Neural Network Model and the Softmax Neural Network Models, then Train the models.		3 hours	9/Dec/2019	C
26	Use my Neural Networks from python and Deeplearning4j/Nd 4j libraries to create the NNModel class		1 hour	11/Dec/2019	C
27	Create Teacher predict function		3 hours	11/Dec/2019	C

	using NNModel class and LinReg class and implement the algorithm with the application				
28	Code Serialization And deserialization methods for all manager and entity classes		20 minutes	16/Dec/2019	C
29	Code all Validation for data entry	Test System using Abnormal, and Extreme Data to ensure validation works	2 hours	23/Dec/2019	C
30	Create technical documentation that include all techniques the code contains, and documentation to increase backend understanding for another programmer attempting to edit the code.	View and understand the technicalities of my system and present the information in a format that another developer can understand.	1 week	23/Jan/2020	C
31	Create Product Video in one take	Showcase the product for its functionality, error management and validation	2 days	10/Feb/2020	D
32	Interview Client to gain feedback against the success criteria	Gain insight about how my client finds the system in terms of how effective it was at functioning as intended, and how well my system achieved the success criteria. Allow my	1 day	13/Feb/2020	E

		client to use my system freely			
33	Using information from the interview, write various improvements and modifications to the system	Analyse client's feedback and formulate an array of modifications to the system: to help other developers know how to extend the code.	1 day	14/Feb/2020	E
34	Evaluation is written	Understand the pros and cons of my system	2 days	17/Feb/2020	E
35	User recommendations	Evaluate the product and suggest improvements	1 day	19/Feb/2020	E
36	Submit			24/Feb/2020	