BTEC Assignment Brief

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| Qualification | Pearson BTEC Level 3 National Extended Diploma in Computing  |
| Unit or Component number and title | 23 |
| Learning aim(s) (For NQF/RQF only) | B and C |
| Assignment title | Assignment 2- Unit 23 - (2024-25) - My Bristol College App |
| Assessor | Enter Name of Assessor |
| Hand out date | Nov 11, 2024 |
| Hand in deadline  | Dec 09, 2024 |
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| Vocational Scenario or Context | Bristol City College is looking for some help from some of the top students in the computing department to analyse and design a new app for them, My Bristol College. It is an app for students to find all the things they need (teams, email, timetables etc) all in one place. You will need to research and analyse, design and plan testing and development using all the tools and techniques you used in your previous assignment. |
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| Task 1 | To develop the app you will need to work in a team (4 or 5 people) in which you will need to discuss the stories and tasks that are needed to make the project. Then plan it out and create a SCRUM board where you estimate the length of the task and assign a person with the right skills to it. You must each individually produce your own report in which you use all the tools you described and analysed before in the first assignment. Your written work must be separate but where you have designed and planned SCRUM boards together you can use the same one. You must list who you worked with to produce common designs and plans. Here is a list of things you need to have in the project analysis and design for My Bristol College App

Define the problem statement (you can discuss this as a team) by providing

A problem statement

Carry out a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis

Then as a team you must carry out requirements gathering, from key stakeholders, and analysis, however in your individual reports you must show evidence of these documents and your analysis

Create a questionnaire for this interview so that you can understand what are the key features (User Interface, database etc) and the nice to have features.

Arrange a meeting with the client requiring the app, Bristol College, and ask them some of these questions. With your team make sure you have understood all the requirements by discussing them in detail (before you start the poker planning, next stage).

Create some forms questionnaires in which you will give to other students and report your results from the interviews or forms returned about what they need (this might be a good idea to do before interviewing the client to give them feedback)

A project plan where you need to plan the project (as a team) using SCRUM poker planning and using Trello (You will need to take screen shots of this completed board as evidence of your planning)

Using the information gathered to break down key features down into stories or tasks. Each story must not take more than a day maximum. Plan all the stories into 8, 1 week sprints or a sensible amount of time you think will be needed to complete the project.

Along with evidence of the SCRUM poker planning, evaluate what kind of systems methodology you are going to use for this project Waterfall, Agile, Spiral, Rapid Prototyping. Say why you chose one over the others.

Get feedback from project manager or the client and discuss why you chose to use these tools, systems methodology etc. Document this so you can show what feedback you were given, and improvements you could make.

Design

Using Data flow diagrams and Entity Relationship diagrams plan out the system. What are the main entities What data stores are needed Provide and evaluation of why you are using these design tools and not some other ones you know about. For this evaluation you may want to discuss how other projects have been successful or not with certain tools and techniques.

Then using Use Case Diagrams and UML diagrams plan out what the main functions of the system are and how the code might look e.g. Food class, customer details class, payment class.

For both these stages in design provide an evaluation of why you are using these design tools.

A visual design is also required that should show how you want the app to look. Draw at least 3 screen designs.

At the end of the report then evaluate

How well did your project meet the requirements

How much testing was done or planned in your project

What were the technological constraints

Did you choose the correct features to develop first, how well do you think you ordered the tasks

How well did you work together as a team, what issues were there, what would you do differently next time

Did you manage your time and planning well

Were your investigation techniques thorough enough

What was your own behaviour and the impact on the systems outcome, including professionalism, etiquette, supportive of others, timely and appropriate leadership, accountability.  |
| Checklist of evidence required  | Evidence of trello or SCRUM board showing the project timescale with stories organised into a sensible order over a sensible amount of time.

Questionnaire and evidence of requirements gathering, such as some the answers.

Discussion of how the SCRUM planning went why you decided on certain stories and how long they would take Evaluation of why you chose certain systems methodology tools (DFD, ERD, UML, USE CASE)

Evaluation of why you chose certain systems methodology over others (Agile etc)  |
| Criteria covered by this task: |
| Unit/Criteria reference | To achieve the criteria, you must show that you are able to: |
| 23 / P3 | Define a problem statement for an identified scenario.  |
| 23 / P4 | Develop a solution to a computing problem, using appropriate systems methodologies.  |
| 23 / P5 | Review the solution to a computing problem, considering feedback from others and identifying possible improvements  |
| 23 / M2 | Justify the choice of systems methodology tools and techniques used to provide a solution to a computing problem.  |
| 23 / M3 | Assess potential improvements to the solution in relation to the problem statement.  |
| 23 / D2 | Evaluate the process of applying a systems methodology to a computing problem in order to develop a proposed solution.  |
| 23 / D3 | Demonstrate individual responsibility and effective self-management in the application and review of systems methodologies to identify and develop a solution to a problem.  |
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| Sources of information to support you with this Assignment | Example of how to write up project see teams assignment

Provides a good overview of system methodology httpwww.tutorialspoint.comsdlcsdlc\_overview.htm

Provides an overview of system analysis and design methodology httpswww.techopedia.comdefinition3983structured-systems-analysis-and-design-method-ssadm

Access to various system analysis presentations httpwww.slideshare.netmrmwood39-techniques-and-tools-for-systems-development  |
| Other assessment materials attached to this Assignment Brief | *e.g. work sheets, risk assessments, case study* |
| **FOR L1/2 FIRSTS ONLY:** If you have not achieved the Level 2 criteria, your work will be assessed to determine if the following Level 1 criteria have been met.  |
| To achieve the criteria, you must show that you are able to: | Unit | Criterion reference |
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