Planning Report - Advice

1. **Introduction to Project**

    I.   Introduction – briefly introduce the very high-level, generalised project info and who the company is that it is for

    II.   Aims of the Project - what will you be doing for the entire project. What are the key milestones in the development of this project

    Essentially – detail (briefly) that you will be following the SDLC – you will perform Analysis to get requirements, then Design followed by Development + Testing. You will finally evaluate your performance and the software itself

2. **Initial Analysis**

    <mark>**Important Note** - you **cannot** do this stage until <u>**AFTER**</u> you receive your questionnaire answers back from the lecturer!</mark>

    I.   Interview Question and Responses – Copy your questions **with my responses** into your report (make sure you have proper headings for each section!)

    II.   Refined Project Task – **Re-word and enhance** the project brief you received based on your understanding <u>and the additional information you picked up from the questionnaire answers</u>

    This means it should be more detailed than the original one you were given

III. Functional and Non-Functional Requirements and Constraints – a bulleted list is fine. Don't get too worried about them – if you miss some you can say this in the evaluation.

Recommendation: - breaking your requirements into sub-sections, for example 'Customer's can do…' (then bullet pointed list) , "Staff can do"

Functional – register / edit account, make, amend and cancel booking / order. View previous bookings / orders. Add products. Payment online really should be a must. SMS / Email confirmation / multi factor authentication etc.

Non-functional should cover – access rights (roles for staff), any interface (look and feel) requirements

Constraints e.g. budget and time

IV. Use Case Diagram + 4 x Use Case Documentation examples – Diagram should be based on your projects **main** use case scenario (i.e. Make A Purchase or Make A Booking) and will have includes / extends to show full functionality of that scenario.

See Use Case Diagram Advice doc for guidance

3. Identification of resources and Materials Required

(and how they will be accessed / obtained) – Identity 4 by writing about each of the below points

I.   **UML Diagramming Tools** – A paragraph explaining what software options you have for creating your design diagrams (Visual Paradigm / Lucid Chart etc.). Compare any two options – giving details, method of interaction (web / windows app etc) and advantages and disadvantages. State how you will access it (downloaded / free license etc?)

A paragraph per option is enough

II. **Justification / Choice of UML Diagramming Tool** – Which one did you choose from above and why?

III. **Programming Language** – Compare any 2 languages – i.e. the <u>one you are choosing</u> and any other. Give details of the language structure, main uses and advantages and disadvantages (e.g. C# / Java / Python / Ruby / PHP etc.).

A paragraphs per language is enough

IV. **Justification / Choice of Programming Language** – Which one did you choose from above and why?

V.   **Framework Options** - Give details of 2 possible options you could have used for your language – e.g. for **Java** - Java Forms / Java Web (Swing) or for **C#** - MVC Web / Windows Forms App. Provide advantages and disadvantages of each. A paragraph per language is enough

VI.   **Justification / Choice of Framework** – Which one did you choose from above and why?

VII.   **IDE Options** – Give details of 2 possible options you could have used **for your language** – provide advantages and disadvantages of each. State how you will access it (downloaded / free license etc?)

A paragraph per option is enough

VIII.   **Justification / Choice of IDE** – Which one did you choose from above and why?

4. **Identification of Information Sources to be used** – **Provide 4 sources** of information that you intend to utilise to assist you. Can be online or physical. **You must justify why each resource will be useful to you**

For example:

- Websites / Books that will:
- Assist with your programming language – e.g. Java or C# training websites – give example URLS / book titles of any
- Assist with specific tasks – e.g. GitHub, Shopify website for examples and inspirations of online shops – give example URLS / book titles of any
- Offer help and tutorials for your development chosen framework (Java Forms / MVC Web etc.) – e.g. Stack Overflow / Website tutorials / Youtube videos etc. – give example URLS / book titles of any
- Assist with writing tests / debugging erros in your code - give example URLS / book titles of any
- Offer advice on accessibility and design – give example URLS / book titles of any

5. **Undertaking the Analysis using Appropriate Techniques** – Provide **4 points** which detail the research and analysis you have performed during the planning phase

   - **Questionnaires** with the Owner of the company. What did you create – and why did you do create it? What benefits did you get from the answers

   - **Use Case Diagrams** say that you used this technique to provide extra analysis to assist in confirming there were no gaps in the understood customer requirements that you produced

   - **Visual Studio and C#** or / **Netbeans and Java** : website, tutorials and videos you used help guides to assist **with choice of dev platform,** language and skills development (i.e. what web / book adviuce did you use to help make your decision)

   - **Adopting A development methodology – e,g, AGILE** – Explain that following a methodology such as Agile allows you to iterate (repeat) software stages so you can chunk up your apps requirements and create small sections, then test to ensure it works before moving on. Provide an example website that helped you understand and utilise this methodology