

Student Guide for Completing the Tourism Booking Software Assignment

Introduction

This guide is designed to help students effectively answer the questions and meet the requirements for the Tourism Booking Software assignment. Follow the recommended page limits and structure to ensure a comprehensive and concise submission.

General Writing Guidelines

- Use formal business language.
- Write in clear and concise paragraphs.
- Use Harvard referencing for citations.
- Keep your answers within the recommended page limits.
- Support your arguments with examples and research.

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Part 1: Software Lifecycle Models

1. Describe two iterative and two sequential software lifecycle models. (1-2 pages, one paragraph per model). Also add images to support your answer
2. Explain risk management: Definition, steps, and strategies in Agile and Waterfall models. (1 page).
3. Explain the purpose of a feasibility report in software development and discuss its components. (1 page).
4. Describe criteria and methods for comparing two technical solutions. (1 page).

At least 3 criteria and 3 methods (describe them and provide example comparing two software)

You can choose from the following as reference:

Criteria

1. Performance
2. Scalability
3. Cost
4. Ease of Implementation
5. Flexibility
6. Reliability
7. Security
8. User Experience
9. Vendor Support
10. Compliance
11. Integration Capabilities
12. Customizability
13. Innovation
14. Environmental Impact
15. Market Feedback

Methods

1. SWOT Analysis
2. Benchmark Testing
3. Cost-Benefit Analysis
4. Weighted Scoring Model
5. Proof of Concept (PoC)
6. Expert Reviews
7. Use Case Analysis
8. Survey or Polling

9. Documentation Review
10. Compatibility Testing
11. Risk Analysis
12. Roadmap Alignment
13. Return on Investment (ROI) Analysis
14. Stress Testing
15. Customer Feedback Analysis

Part 2: Software Investigation and Analysis

1. Conduct a software investigation to understand the requirements for the tourism booking software by gathering requirements using two techniques (with evidence), analyzing current systems, and identifying key functionalities needed. (2-3 pages)

- Method 1: Describe the method and findings (1 page).
- Method 2: Describe the method and findings (1 page).
- Requirements gathered from both methods (1 page).

- Note: **You provide evidence of the techniques used.** For **interviews**, you should record them and include both the questions and answers. For **storyboards**, you should submit the storyboard drawings. For **surveys and questionnaires**, you should provide the survey questions (survey link) along with the responses.

2. Create a feasibility report for the tourism booking software system. (2-3 pages):

- Introduction, Legal Feasibility, Economic Feasibility, Technical Feasibility, Operational Feasibility, Scheduling Feasibility, and Conclusion.

3. Create a Software Requirements Specification (SRS) document for the tourism booking software system. (2-3 pages).

- Project description:
- User requirements:
- System requirements:
- Functional Requirements:
- Non-Functional requirements:

4. Discuss the selection of a lifecycle model for the tourism booking software system (1 page).

Part 3: Software Design Techniques and Behavioral Tools

1. Discuss two examples of software behavioral design techniques (1 page).

2. Differentiate between FSM and extended FSM, with examples of where each might be used in a tourism booking software system? (1 page).

YOU MUST PROVIDE AT LEAST two differences

You must mention the object and (states/transitions). Drawing is not required in this point

3. Create a Software Design Specification (SDS) document for the tourism booking software system, including:

- Data Flow Diagram (DFD) in context level and level 0 then choose one of (Flowchart, FSM, EFSM, (2 pages).

4. Provide an implementation of the tourism booking software system. You can use tools like Adalo, WordPress. You may use other tools with the approval of your instructor. The implementation must cover following requirements (user registration, package creation, and reservation management) you must provide screenshots for each feature in addition to your implementation URL or Code. (2-5 pages) add **screenshots**.

Part 4: Software Quality and Testing

1. Discuss two approaches to improving software quality (1 page).

2. Evaluate the process of undertaking a systems investigation (1-2 pages).

Consider the following points:

Identify the objectives.

Define evaluation criteria.

Assess stakeholder satisfaction.

Measure software quality improvements.

Consider cost and time efficiency.

Review documentation and deliverables.

Learn from feedback and lessons learned

3. Create a Requirements Traceability Matrix (RTM) document with at least five functional requirements and two test cases each (1-2 pages).

Part 5: Evaluation and Justification

1. Assess the merits of applying the Waterfall lifecycle model to a large project (1 page).

In this point you must support your answer with real life case

2. Evaluate how cost, time, resources, and legal requirements affect decision-making (1 page). **You must provide positive and negative impact for each point in your booking software**

3. Justify the use of data-driven approaches like data analytics and machine learning (1 page). **You must support your answer with examples of data driven usage in booking software**

References

Include all references used in the assignment. Ensure they are cited in Harvard referencing style.