

SE_DAY4_Software-Project-Management Questions

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Questions and Answers

1. **Why is timely delivery crucial in software project management, and how can project managers ensure that deadlines are met?**

Timely delivery ensures that the project stays within budget, maintains stakeholder satisfaction, and avoids opportunity costs. Project managers can ensure deadlines are met by creating detailed timelines, utilizing project management tools, managing resources efficiently, and constantly tracking progress with milestones.

2. **How does effective cost control contribute to the success of a software project? What strategies can be used to prevent budget overruns?**

Effective cost control helps maintain the financial viability of the project, ensuring that the company does not incur losses. Strategies include detailed budgeting, continuous cost tracking, scope control, and contingency planning for unforeseen expenses.

3. **Compare and contrast Agile and Waterfall methodologies. What are the main advantages and disadvantages of each?**

Agile is iterative, allowing for flexibility and frequent adjustments, while Waterfall is a linear approach with clearly defined phases. Agile allows for more customer feedback but can lead to scope creep. Waterfall provides a clear structure but is less adaptable to change.

4. **In what types of projects might Agile be more beneficial than Waterfall, and vice versa? Can you provide examples of each?**

Agile is beneficial for projects that require constant feedback and adaptation, such as software with evolving requirements (e.g., web applications). Waterfall is better for projects with well-defined requirements, such as infrastructure or hardware development.

5. **What are some methods for ensuring quality assurance throughout a software project? Why is it important to maintain high standards?**

Methods include code reviews, automated testing, continuous integration, and regular quality checks at each phase. High standards are important to prevent defects, ensure customer satisfaction, and reduce the cost of fixing issues later in the project.

6. **How does defining the project scope contribute to successful project planning? What is a Work Breakdown Structure (WBS), and why is it useful?**

Defining the project scope helps prevent scope creep and ensures all parties have a clear understanding of deliverables. A WBS breaks the project down into smaller, manageable components, making it easier to assign tasks, estimate costs, and track progress.

7. **What are the benefits of developing a detailed project schedule, and how can Gantt charts assist in this process?**

A detailed project schedule provides clarity on task timelines and dependencies. Gantt charts visualize the timeline of tasks, helping to track progress and identify any delays that could affect the overall project.

8. **What are the core issues that your software aims to address? Why are these problems significant to your target audience?**

The core issue the software addresses is inefficient stock management in retail. These problems are significant to retailers because they lead to lost sales, overstocking, and operational inefficiencies, which negatively impact profitability.

9. How can clearly defining the problem help in developing a more effective software solution?

Clearly defining the problem ensures that the solution is tailored specifically to address the root cause, avoiding unnecessary features and focusing development efforts on the areas of greatest impact.

10. How would you describe your software solution in a way that captures its essence without diving into technical details?

Our software optimizes stock management by providing real-time insights, automating key processes, and reducing waste, helping retailers make informed decisions to improve efficiency and profitability.

11. What are the main features or functionalities that make your software stand out?

The main features include real-time stock tracking, predictive inventory management, automated replenishment alerts, and a user-friendly dashboard that provides actionable insights.

12. What data is available regarding the market size and growth potential for your software?

The market for retail management software is expected to grow by 10% annually, driven by increased adoption of automation tools in small to medium-sized businesses, with a significant focus on real-time data analytics.

13. How can understanding market trends inform your software's positioning and development?

Understanding market trends helps tailor the software to meet the evolving needs of the industry, ensuring it remains competitive. For example, the shift towards cloud-based solutions can inform decisions to offer SaaS options for the software.