TSU en Tecnologías de la Información Área Desarrollo de Software Multiplataforma

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Software Development Process Management

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Software Development

Plan (SDP)

Grupo: 10-B

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What is DSP?

A software development plan is a strategic roadmap that outlines the entire software development life cycle (SDLC), including goals, resources, budget, and timeline. It helps ensure efficient development, resource management, risk prevention, cost control, and successful software delivery.

A well-crafted project plan for software development sets the foundation for a smooth software development project and acts as a bridge between development teams and stakeholders, ensuring everyone is on the same page. In contrast, a development project without guidance can lead to delays, budget overruns, and potential chaos.

Main objective

The main objective of a Software Development Plan is to provide a type of framework where the team members can have a clear knowledge and understanding on the particular software project on which they are working and the problems which the team members want to solve. The SDP is also used to find the time and cost effective solutions to complete and deliver reliable, high quality projects to the users.

Key elements

- Project goals and requirements: Clearly identify the purpose, target users, functional and non-functional requirements, and desired outcomes of the end product.

- Timeline and milestones: Create a realistic software development timeline with detailed and precise milestones, providing a project roadmap for everyone to stay on track.
- Roles and responsibilities allocation: Define each team member's responsibilities and tasks to guarantee efficient accountability and collaboration.
- Budget: Estimate the development costs, resources expenses, and other associated expenses.

5 steps on creatig a development plan

Analyze the project's scope and requirement
- Alignment: How does the client's need and request fit in with the company's ability and expertise?
- Resources: Does the company have the infrastructure, human, tech stacks, and time to achieve the project's goals?
- Budget: What is the client's offered pricing model and budget for this software development project? And is it consistent with the company's pricing models and resources?

Define project objectives
After deeply understanding the client's requirements for the project, the next step is identifying the software project's goals and objectives.

The project's objectives defining phase includes specifying intentions, visions, and preferred endpoint. Applying formulas like SMART criteria (Specific, Measurable, Achievable, Relevant, Time-bound) can make objectives more concrete and actionable.

Build an effective software development team
Based on the objectives defined in Step 2, you can form a development team with roles and capabilities that match the project's scope and meet customer expectations. Picking

the proper member right from the start decides the project's success in meeting the quality and delivery time.

After the full team is formed, assigning a project manager becomes essential for efficiently managing the entire team. The ideal project manager should possess prior experience in a similar or relevant project type and have an in-depth knowledge of the domain.

Identify risks and mitigation

Now, when the clients, developers, stakeholders, and other parties are involved, the whole team can sit down together and identify potential challenges and develop a mitigation plan accordingly.

To create a thorough plan, the team needs to go through end-to-end production stages, covering from development, testing, UI/UX design, and system integration to product launch.

A severity risk matrix is a recommended tool to use. This allows demonstrate the probability of a problem occurring and predict its consequences. In case you are delegating your software development project to an outsourced team, make sure they are qualified with risk management certifications.

You may also follow the ISO 9001:2015 which ensures that all of the project managers and technical leaders are going to be fully aware of risk management and how to mitigate and eliminate risk throughout the software development process.

Create a timeline

Developing a software development project timeline with realistic deadlines, and milestones helps in setting expectations, and monitoring and tracking the progress.

Before finalizing the timeline, make sure to have all the team member's agreement. Any suggestions from the team members about extending deadlines, or any other arising tools, etc., should be discussed and agreed upon starting the project. This ensures no unexpected incidents will interrupt the software development process.

References:

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