The Issues I Faced, as a Software Engineer

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In this paper, I will discuss on various issues that I face as a Software Engineer, and as a Lead Software Engineer of a team, during the software development lifecycle. Furthermore, the solutions to them will also be discussed, from the perspective of a Software Engineer.

Challenges, As An Individual

As a person, who is passionate about software development, I have faced many difficulties in my career. These difficulties are common with other Software Engineers, but usually don't consider them problems. But the most important thing is that we should always be prepared for these concerns. It's very critical to know about handling them in advance, because we won't have much time to think about it and solve it, afterwards. Some challenges are as follows;

Understanding The Problem

"Understanding your Problem, is Half the Solution" (Dolfing, 2018). Before we start solving an issue, it's essential to understand it first. It's not just about knowing what the concern is, but also understanding how it affects the entire software and its structure, and which approach we use to solve it. Which brings us to the next point.

The Approach

The approach we use to solve a problem is very influential. There are many ways to do this, such as through software design patterns and strategies (Jain, 2020). But, we should always try to find the simplest solution first and then move on from there. It's not just about finding the most

efficient way to do it, but also making sure that it won't alter other parts of our code when we make changes in one place.

Meeting Expectations

The most important thing about software development is to make sure that the expectations are being met. We should know what the client wants and how they want it done. This can be difficult if we are not familiar with their business or industry, but once we get a feel for it, it becomes much easier (Dima & Maassen, 2018).

Integrations With Other Applications

Integration is another aspect of software development that can be difficult. We need to make sure that our application is compatible, and communicates with other applications properly, whether it's on our own device or server, or at another server somewhere else. This is especially significant if we are building an application, which uses third-party services, like Google Services, Authentication Services, etc.

Challenges, In The Team Work

The problems faced by a software engineering team, if not addressed (or led) properly, will lead to inefficient development of the product and its customers may lose interest. Some of the issues I faced, as a Lead Software Engineer, are as follows;

Lack Of Employee Skill

My biggest challenge as a Lead Software Engineer is the lack of employees with the required skills. If I am assigned to a project, I immediately start thinking about my co-workers and what skills they would bring to it. This is one of the biggest problem encountered in the software world today ("Impact of Employee Training on Organizational Performance– Case Study of Drilling Companies in Geita, Shinyanga and Mara Regions in Tanzania," 2018).

Uneven Workload Distribution

One of the biggest challenges I faced was work distribution. If it was distributed unevenly on a project, it would result in unnecessary manpower and costly delivery delays for the company. The software engineering project needs to be manageable, otherwise it would affect customer satisfaction and revenue growth, as well as employee productivity and morale. Ensure there is proper communication between team members and assign team members to specific roles so that there is the least conflict among them (Reynolds, 2022, Uneven Workload Distribution).

Marketing

As a lead software engineer, I have to be aware of the challenges faced by my project as well as my team members. Looking at it from a business point of view, we cannot offer our services to our clients unless we have adequate marketing and advertisement. There is no need to advertise our services if we are already being spread across the world. The key aspect of our job is to show the people around us that we have something which they need and which can make their lives easier.

References

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