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**Course:** COMP6841 Software Project Management

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**Key Concepts Learned:**

1. As I progress through this course, I've realized that managing a software project is as important as developing the software itself. It's not just about writing code but ensuring the project is planned, executed, and delivered successfully. One of my key takeaways is understanding how a project manager starts working on a software project from scratch. This includes defining objectives, identifying stakeholders, and establishing timelines, budgets, and risks.
2. I've also explored Configuration Management Systems (CMS). I now understand that a CMS helps track changes, maintain consistency, and manage different versions of software throughout development. A CMS consists of version control, change management, configuration identification, and status accounting. Implementing a CMS is essential to avoid inconsistencies, ensure traceability, and improve collaboration. To deploy it successfully, teams can use strategies like automated version control, clear documentation, and strict access control policies.
3. I've also learned about Software Project Plans, which serve as blueprints for development. A project plan includes objectives, scope, timeline, resources, risks, and communication strategies. There are different types, such as development plans, maintenance plans, and risk management plans. Creating a project plan requires inputs like project requirements, stakeholder expectations, and resource availability. Common techniques used include Work Breakdown Structures (WBS), Gantt charts, and Agile planning frameworks.

Understanding these concepts has deepened my appreciation for structured project management. Moving forward, I want to explore practical applications and tools that can enhance efficiency in real-world software projects.

**Application in Real Projects:**

1. Configuration Management System (CMS) in Action
   Large tech companies like Microsoft or Google use CMS to manage multiple versions of their software products. For example, in the development of an operating system like Windows, version control tools (such as Git or SVN) track changes made by developers. This prevents conflicts, ensures code integrity, and allows for seamless rollbacks if issues arise. Airlines also rely on CMS for flight control software updates, ensuring every version is tested and properly documented before deployment.
2. Software Project Plan in Industry

A software project plan plays a critical role in companies handling enterprise solutions. Take an e-commerce giant like Amazon: before launching a new recommendation algorithm, the project team would create a detailed plan covering scope, timeline, testing phases, and risk analysis. Techniques like Gantt charts help visualize milestones, while Agile sprints allow flexibility in refining the project based on customer feedback.

**Peer Interactions:**

1. Collaborating with my project teammates to create a market analysis report on current online tutoring platforms was an insightful experience. We designed a Google Form to collect real-world data, ensuring that our analysis was based on actual user feedback. I actively interacted with several colleagues, encouraging them to provide their responses.
2. This process was incredibly fruitful for me. It gave me firsthand exposure to data collection, survey design, and stakeholder engagement—key skills in software project management. Through discussions with my peers, I gained a deeper understanding of market trends, user preferences, and competition in the e-learning industry. More importantly, I realized how crucial structured data gathering is for making informed project decisions. This experience reinforced the importance of collaboration and real-world validation in software development.

**Challenges Faced:**

1. A major challenge was grasping the complexity of project management concepts, especially in applying frameworks like CMS and Software Project Plans to large-scale projects. The technical jargon and variety of planning techniques were initially overwhelming.
2. Gathering meaningful survey responses for the market analysis posed difficulties, requiring me to explain the survey's purpose and encourage participation. Analyzing the data and deriving insights also required deeper critical thinking. These challenges helped me improve my analytical and communication skills.

**Personal development activities:**

This week, I've gained a deeper understanding of the interconnectedness between project planning, execution, and monitoring. I've also developed an appreciation for the role of project managers in anticipating challenges and creating structured plans. On a personal level, I improved my communication and teamwork skills while working on the market analysis survey. I became more confident in explaining complex ideas clearly and applying data analysis techniques to real-world problems. This combination of technical and interpersonal growth is something I look forward to building on.

**Goals for the Next Week:**

Next week, my team will pitch an Intelligent AI Tutoring System to the class. The challenge will be to communicate the system's technical aspects while keeping it clear and engaging for a diverse audience. We'll need to balance technical details with a compelling value proposition and anticipate questions. It will be an opportunity to refine our presentation skills and demonstrate our ability to present complex ideas simply and confidently.