Software Design minute paper

★ You can choose language you use as you like. 記入は日本語でも英語でも良いです。
Date：2024-07-25
Student ID：Z123332
Name：CHEN HE MIN

Today's topics：Reuse and Summary

(Describe your summary in each blank below. You can adjust (increase or decrease) spaces as you like.
以下のそれぞれの項目の下に要点を記載。スペースは自由に増減して良い。)
[What you learned (学んだこと)]
I learned about the concept of software reuse and its benefits and challenges. Software reuse involves using existing software components in new systems, which can improve efficiency and reduce costs. Key benefits include increased dependability, effective use of specialists, standards compliance, and accelerated development.

The lesson also discussed the potential problems associated with software reuse, such as increased maintenance costs, lack of tool support, the not-invented-here syndrome, and the challenges of creating, maintaining, and using a component library. Understanding these challenges is crucial for effectively managing and implementing software reuse in projects.

Additionally, we reviewed important principles and best practices for software development, summarizing key topics covered throughout the course. This included a discussion on the importance of design patterns, which provide reusable solutions to common design problems, and the role of application frameworks in supporting reuse.

[What you need to learn more (更に学びが必要だと思うこと)]
I need to explore more real-world examples of successful software reuse to understand how to apply these concepts effectively. Learning about different tools and techniques that support reuse, as well as strategies for overcoming common challenges, will also be beneficial. Additionally, gaining more experience with design patterns and application frameworks will help in developing reusable and maintainable software systems.

[Misc. Comments and/or questions (その他 所感・質問等)]

Understanding how to balance the trade-offs between reusing existing components and developing new ones from scratch would be useful. Additionally, learning best practices for documenting reusable components and ensuring their compatibility with different systems is important.