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| Lab 2 | | | Developing Module Structure Diagram for Your Systems | | | | | |
| Issue Date | | 2023-11-10 | | | experimental types | | □validation experiment,  □comprehensive experiment  ☑design experiment | |
| Goal  (1)Add more details to your dataflow diagram;  (2)Develop the module structure diagram for your dataflow diagram. | | | | | | | | |
| * experimental contents and process   **1. Division of labor**  Our division of labor is as follows.  **Qianzhe Cai** is responsible for the drawing of the structure chart of the punch card function module and the summary and integration of the experimental report.  **Xin Huang** is responsible for the drawing of the structure chart of the function module of inquiring dormitory situation  **Jun** **Xue** is responsible for the drawing of the overall module structure diagram  **Yufei Sun** was responsible for drawing the structure chart of dormitory evaluation function module.  After completing the above work, we will have a meeting to discuss whether everyone's work content is perfect and whether the structure diagram of each module is correct. **Jun** **Xue** will take the minutes  **3.** **System module design report**  3.1 SWU Dormitory management system overall (Jun Xue)  The overall data flow diagram is as follows.    Figure 1 Overall data flow diagram  The overall module structure diagram is as follows    3.2 Punch card function module (Qianzhe Cai)  Punch card function refined data flow diagram is as follows.    Figure 2 Punch card function refined data flow diagram 1    Figure 3 Punch card function refined data flow diagram 2  Punch card function module structure diagram is as follows.    Figure 4 Punch card function module structure diagram  3.3 Punch function (Yufei Sun)  The detailed data flow diagram of dormitory evaluation function is as follows.    Figure 5 Detailed data flow diagram of dormitory evaluation function  The structure diagram of dormitory evaluation function module is as follows.    Figure 6 The module structure diagram of dormitory evaluation function  3.4 Dormitory evaluation function (Xin Huang)  Query dormitory information function refined data flow diagram is as follows.    Figure 7 Query dormitory information function refined data flow diagram  The module structure diagram of the function of querying dormitory information is as follows.    Figure 8 The module structure diagram of the function of querying dormitory information  **4. Meeting minutes**  Date: 2023/11/14Attendees:1. Qianzhe Cai2. Yufei Sun3. Xin Huang4. Jun Xue  The review meeting for the Module Design of the Dormitory Information Management System was held on November 15, 2023. The purpose of the meeting was to thoroughly examine and discuss the report, ensuring its completeness, consistency, and clarity.  The meeting commenced with an introduction by the group leader, Qianzhe Cai, who provided an overview of the experiment objectives and the importance of the review process. Each group member actively participated in the discussion, sharing their individual contributions and insights into the refined dataflow diagrams and module structure diagrams for the chosen subsystems.  Throughout the meeting, Xin Huang and Jun Xue meticulously reviewed each section of the report, paying close attention to the refined dataflow diagrams and module structure diagrams. The aim was to ensure that all relevant details were adequately presented, enabling a comprehensive understanding of the system's module design.  Constructive suggestions were put forward by Yufei Sun, focusing on areas that required clarification or improvement. These suggestions encompassed clarifying terminology and abbreviations used in the report, enhancing the visual representation of the module structure diagrams for improved readability, and examining the division of processes into subsystems for potential overlaps or redundancies.  The group engaged in insightful discussions, addressing each suggestion in detail. Consensus was reached on the necessary revisions, and tasks were assigned to individual members to implement the suggested improvements and finalize the report.  It was agreed upon that the revised report would be completed within November 15, 2023. The group leader, Qianzhe Cai emphasized the importance of meeting the submission deadline and encouraged everyone to actively contribute to the finalization process.  After a comprehensive review of the Module Design report for our dormitory information management system, the group members expressed a shared vision for the next phase of development. Building upon the progress made in the current experiment, the following outlook was collectively agreed upon:  1. In the upcoming phase, Yufei Sun and Qianzhe Cai will focus on mastering the framework of the student dormitory management system, aiming to lay a robust foundation for the subsequent stages of development. This will involve gaining proficiency in system architecture and design principles, thereby ensuring the scalability and efficiency of the system.  2. Xin Huang will lead the effort to enhance the project's introduction, with a specific emphasis on refining the features related to system entry and the modification of members and dormitory information. This will involve integrating user feedback and industry best practices to create a more intuitive and user-friendly interface.  3. Jun Xue will spearhead the specific improvements and developments related to inquiring about the dormitory situation. Additionally, Jun Xue will take responsibility for the comprehensive documentation of the meeting minutes, ensuring that all crucial insights and decisions are accurately captured for future reference.  In conclusion, the meeting served as a valuable platform for collective analysis and refinement of the Module Design report. The group members expressed their commitment to promptly complete their assigned tasks, ensuring the report's quality and cohesiveness.  Meeting Adjourned. | | | | | | | | |
| * Experimental summary/ Analysis   Our team successfully achieved the objectives of adding more details to our data flow diagram and creating a module structure diagram aligned with the data flow diagram. Through meticulous teamwork, each member contributed to specific modules, fostering effective communication and task delegation.  The experiment provided a valuable hands-on opportunity to deepen our understanding of system design principles. We not only enhanced our data flow diagram by incorporating additional details but also translated this diagram into a comprehensive module structure diagram. This process highlighted the interconnectedness of subsystems within the Dormitory Information Management System.  During the review meeting, constructive feedback was shared, leading to collaborative refinements in our documentation. The division of labor facilitated a focused approach, ensuring that each team member's expertise contributed to the overall success of the project.  Looking forward, the insights gained from this experiment will serve as a solid foundation for future collaborative projects. We've not only applied theoretical knowledge but also honed practical skills in system design, emphasizing the importance of clear communication and meticulous analysis in developing effective module structure diagrams. | | | | | | | | |
|  | Criteria | | | | | | | scale |
| Goal | | | | | | | A B C D E |
| Process | | | | | | |
| Design | | | | | | |
| Algorithm | | | | | | |
| Code | | | | | | |
| Data/Results | | | | | | |
| summary | | | | | | |
| written | | | | | | |
| Score | | |  | | tutor Signature：  Date: : | | |
| * Lab Evaluation Criteria   A: This lab is exceptional, working and meeting all of the specifications. The code is exceptionally well organized and very easy to follow. The code could be reused as a whole or each routine could be reused. The documentation is well written and clearly explains what the code is accomplishing and how. The program was delivered on time. The code is extremely efficient without sacrificing readability and understanding.  B: This lab is very good-- works and produces the correct results and displays them correctly. It also meets most of the other specifications. The code is fairly easy to read. Most of the code could be reused in other programs. The documentation consists of embedded comment and some simple header documentation that is somewhat useful in understanding the code. The program was delivered within a week of the due date. The code is fairly efficient without sacrificing readability and understanding.  C: This lab is adequate, with only minor deficiencies. The program produces correct results but does not display them correctly. The code is readable only by someone who knows what it is supposed to be doing. Some parts of the code could be reused in other programs. The documentation is simply comments embedded in the code with some simple header comments separating routines. The code was within 2 weeks of the due date. The code is brute force and unnecessarily long.  D: This lab shows some effort but has at least one major deficiency. The program is producing incorrect results. The code is poorly organized and very difficult to read. The code is not organized for reusability. The documentation is simply comments embedded in the code and does not help the reader understand the code. The code was more than 2 weeks overdue. The code is huge and appears to be patched together.  E: This lab is poorly written and shows very little effort or understanding. | | | | | | | | |