Criterion B: Record of tasks

| Task<br>number | Planned action                       | Planned outcome   | Estimated duration | Completion date | Criterion |
|----------------|--------------------------------------|---|--------------------|-----------------|-----------|
| 1              | Initial client meeting               | Mrs. Morey's permission to be my client and to implement the offered solution. Mrs. Morey's requirements and desired product are to be well understood and identified.  | 1 hour             | Nov 30, 2021    | A         |
| 2              | Further planning for the solution    | Reorganizing the success requirements from the conversation and think about possible resources needed from Mrs.  Morey  | 1 hour             | Dec 10, 2021    | A         |
| 3              | Writing criterion<br>A documentation | Write down the issue and the proposed solution, as well as the rationale for the solution and the programming language used. Based on Mrs. Morey's response, refine success criteria and write them down in a document. | 3 hours            | Dec 13, 2021    | A         |
| 4              | Client inquiry                       | Inquire list of vocabularies for the program from Mrs. Morey  | 15 minutes         | Dec 15, 2021    | A         |

| 5  | Initial thinking of the solution  | Determine on the overall methodology, identify smaller stages of the program as well as the target completion date for each  | 2 hours  | Dec 20, 2022 | В |
|----|---|--|----------|--------------|---|
| 6  | Design the data<br>flow diagram of<br>the program and<br>its overall<br>structure | Design how the program would work in draw.io   | 2 hours  | Jan 10, 2022 | В |
| 7  | Design<br>prototypes for<br>the GUI   | With the help from data flow diagram, various prototypes of frontend are designed to match each frame using PowerPoint.  | 2 hours  | Jan 10, 2022 | В |
| 8  | Create test plan<br>for each success<br>criterion                                 | A comprehensive test<br>plan is created<br>addressing each<br>success criterion,<br>testing the<br>performance of all<br>functionality and the<br>emergence of<br>potential bugs | 1.5 hour | Jan 11, 2022 | В |
| 9  | Research and understand essential algorithms                                      | Research and choose essential algorithms incorporated in the program. The understanding of these algorithms is enhanced by writing pseudocode and drawing flowcharts.            | 1 hours  | Jan 11, 2022 | В |
| 10 | Develop backend<br>of the program<br>based on design<br>of UML diagram            | Backend classes are coded based on UML diagram with functionality tested and debugged.   | 2 hours  | Jan 12, 2022 | В |

|    | Collect client feedback for the                            | Show Mrs. Morey the current design progress for   | 1.5 hours  | Jan 13, 2022 | В |
|----|--|---|------------|--------------|---|
|    | frontend design  | feedback. Add/improve design as necessary   |            |              |   |
| 11 | Writing criterion<br>B documentation                       | Organizing all proofs of design processes including diagrams, charts, pictures into the documentation, as well as test plan and record of task. | 2 hours    | Jan 15, 2022 | В |
| 12 | Develop the home page                                      | Code the GUI and the backend for the home page based on the prototypes  | 1 hour     | Jan 20, 2022 | С |
| 13 | Program the backend for the storage system                 | Code a class that can store/retrieve data from a text file  | 4 hours    | Jan 21, 2022 | С |
| 14 | Program the backend for the collection system              | Code a class that can add/edit words on the text file   | 4 hours    | Jan 22, 2022 | С |
| 15 | Program the frontend for the storage and collection system | Code the GUIs from<br>the prototypes into<br>the storage and<br>collection system   | 3 hours    | Jan 23, 2022 | С |
| 16 | Create text file with existing words                       | Create a text file using the word list sent from Mrs. Morey   | 30 minutes | Jan 23, 2022 | С |

| 17 | Program the backend for the training system (normal mode)           | Code a class that can<br>perform the activities<br>described (remember<br>and check; guess and<br>type and multiple<br>choice) | 5 hours    | Jan 24, 2022 | С |
|----|---|--|------------|--------------|---|
| 18 | Program the backend for the training system (reversed mode)         | Add the reversed mode for activities described (remember and check; guess and type and multiple choice)                        | 2 hours    | Jan 24, 2022 | С |
| 19 | Program the frontend for the training system                        | Code the GUIs from<br>the prototypes into<br>the training system   | 3 hours    | Jan 25, 2022 | С |
| 20 | Test and debug<br>the entire<br>program                             | Test the program in its entirety based on the test plan, identify and fix any bugs that emerge                                 | 5 hours    | Feb 2, 2022  | С |
| 21 | Writing criterion C documentations                                  | Explain use of techniques with screenshot of code, completion of criterion C document  | 5 hours    | Feb 5, 2022  | С |
| 22 | Interview with client for feedback of the final product             | Product is presented to the client for testing. Client's comment on the final product is collected                             | 30 minutes | Feb 7, 2022  | С |
| 23 | Minor<br>modifications of<br>code based on<br>client's<br>feedbacks | Feasible minor improvements are made based on client's feedback of the product presented                                       | 1 hour     | Feb 8, 2022  | С |

| 24 | Recording<br>Criterion D video  | Criterion D video is<br>completed with<br>explanation and<br>evidence of the<br>program functioning   | 1.5 hours | Feb 9, 2022  | D |
|----|---|---|-----------|--------------|---|
| 25 | Writing Criterion<br>E document   | Criterion E document is completed by organizing the Mrs. Morey's feedbacks on success criteria and possible further development of the project. | 1.5 hours | Feb 10, 2022 | E |
| 26 | Discussion with<br>Mrs. Morey<br>about the<br>deployment of<br>the solution | Meet with Mrs. Morey to discuss details about the deployment of the program into her class  | 1 hour    | Feb 15, 2022 |   |