Competency Reflection

Pick five competencies and reflect on how they are important to the projects you worked on this semester and what skill level you have attained with those different competencies. You will pick a new set of five each semester, so plan ahead. Use the rubric explanation in the header to help you know what the levels of competence are.

You should attach this document to your reflection(s) or you can use this document as a starting point for your reflections. Reflect on each of your five competencies in separate paragraphs.

[The blank competencies at the bottom may be used to insert your own skill(s) or competency(ies) that are important to you and the development of your project.]

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| **Design:**  **B1** Develop detail design specifications. |  |  |  |  |  |
| **Development:**  **C1** Create and modify new or existing system interfaces.  **C2** Create and modify new or existing code. |  |  |  |  |  |
| **Project Management:**  **F1** Define scope of project.  **F4** Estimate time requirements.  **F7** Evaluate project requirements. |  |  |  |  |  |
| **Understands and Uses Complex and Dynamic Data Structures:**  Create and use dynamic data structures including but not limited to linked lists, stacks, queues, and trees.  **11101** Create and use pointers and dynamic memory allocation. |  |  |  |  |  |
| **Problem Solving:**  **11115** Define the general scope of work to meet project requirements or solve a problem.  **H1** Define the problem.  **H3** Identify/test possible solutions.  **H5** Implement solution. |  |  |  |  |  |
| **Analysis:**  **A1** Be able to gather data to identify customer requirements.  **A2** Interpret and evaluate requirements.  **A3** Define scope of the work to meet customer requirements.  **A4** Develop high level systems and functional specifications. |  |  |  |  |  |
| **Input:** The student demonstrates skill in receiving input from appropriate devices including but not limited to the keyboard and mouse. |  |  |  |  |  |
| **User Interface:** The student demonstrates skill in designing user interfaces that are easy and efficient to use. May include (but not limited to) menus, Heads Up Display (HUD), and other indicators. |  |  |  |  |  |
| **Surfaces/Sprites:** The student demonstrates skill in making surfaces/sprites for bitmaps and manipulates them according to the structure of the game/simulation. This includes background scrolling and manipulating onscreen and offscreen surfaces/sprites. |  |  |  |  |  |
| **Sprites/Animations:** The student demonstrates skill in manipulating surfaces/sprites to form animations that are applicable and appropriate to the game/simulation. |  |  |  |  |  |
| **Collision Detection:** The student demonstrates an understanding of and effectively uses collision detection as appropriate to the game/simulation. Including object to object and object to cursor. |  |  |  |  |  |
| **Physics:** The student demonstrates skill in manipulating the physics of the environment according to desired parameters. |  |  |  |  |  |
| **Automation:** The student demonstrates skill in automating objects according to the requirements of the game/simulation. This includes but is not limited to random events. |  |  |  |  |  |
| **Sound:** The student demonstrates skill in creating and manipulating sound in the game/simulation. This includes but is not limited to tone generation and playing wave and midi files. |  |  |  |  |  |
| **3D:** The student demonstrates skill in creating and manipulating objects in a 3D environment. |  |  |  |  |  |
| **Artificial Intelligence:** The student demonstrates skill in creating artificial intelligence relevant to the game/simulation. |  |  |  |  |  |
| **Debugging:** Student uses various devices to debug programs. This includes but is not limited to outputting variables and using the compiler’s debugger. |  |  |  |  |  |
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