1. Define what the program is to do.
   1. Purpose: Create a program to act as an information system for Oregon State. The information system will store data about the university, it’s buildings, and people at the university.
   2. Input: The only input I expect to have from the user is through the menu options. The choices for the menu will be to print the information for all the buildings, print the information for the people at the university, choosing a person to do work, and exiting the program. I plan to have the GPA, instructor rating, and work hours be randomly generated by the program. There will also be input required from a second menu system if the work hours menu is selected. This menu will require that the user select a person to have the random work hours applied to.
   3. Output: The initial output will display the menu with the options provided above. If the building information is selected then the name, address, and size of every building will output to the screen. If person information is selected then the name, age, and GPA, or rating as appropriate will print to the screen. If Choose person for work is selected then a menu will display prompting the user to select a person to have work information displayed for. When the person is chosen then the program will output the number of hours either spent studying or grading as appropriate.
2. Model the program
3. Class hierarchy diagram
4. Testing Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test | Input Values | Driver Functions | Expected results | Observed outcomes |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

1. Reflection