

Project #3 and Project #4 (final project) Description:

What you are going to eventually create for the final project:

Create a program that allow instructors to “flip” the learning within their classrooms. This program can be used to supplement a traditional lecture environment, could be used in conjunction with an online course, or a blended classroom. Additionally, this software is aimed to game-ify learning. Thus, introducing fun and games into learning (yep - I know shocking).

The software should promote group learning, be customizable by instructors in content, and straightforward to be used by a diverse group of people with various levels of computer literacy. One of the primary goals of this software is to get students to use the software, log in often, and have fun while learning.

Design a program that will allow teachers and professors to do the following:

- Create (or upload) homework assignments, projects, quizzes, and test content into the system
- Create a series of “Quests” to build certain skills
- Create (or display) a skill list related to a class/assignment/project/quizzes/tests
- Assign a skill, difficulty level, etc to each problems
- Create a level list with corresponding point values
- Each question / item / Quest has a skill(s) designation
- Quests can contain multiple combinations of skills or skill levels
- Keep track of individual student progress
- Allows students to be members of various defined groups (guilds)
- Generate reports in various ways (i.e., individual quests, individual skills, individual students, specific groups, etc.)
- Calculate the current level for each student

What you need to do for Project #3 (of the final project):

- Decided which free standing part of the project you are going to start with
- Create the user stories, unit testing, and acceptance testing for this portion of the project
- Refactor at least 3 times within your code (these could be an algorithm re-design / improvement, code cleaning up, increase/decrease the number of functions/methods, improvement of code structure, change in data structure, etc)
- Create a plan of work
- Complete the pair programming chart
- Decide how you will connect this portion with the other parts