Final Project Proposal

The Major Pathway

Group members:

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Overview / problem:

Students,especially first years, often feel overwhelmed by the rich and rigorous course offerings and major requirements while they're transitioning to college. Students are expected to find all related information at the department website on their own. Although the website is a good resource, some further explanations are necessary to provide students with a big picture of their education. With the goal of informing students in an interactive way, we want to build a browser "role playing game" to help students better understand the paths through Computer Science majors and minors at Smith. Ideally, it informs the players about the course offerings of CS department and the tracks they may go through. After playing this game, students would have a basic idea about what a CS major student's education looks like.

Strategy:

Ideal:
We plan to use python to write our code. We want to use html to build the web structure, and then load our python code as a source.

Actual strategy:

- Create the "storyline" and basic graphic and game scene designs.
- Implement the graphic designs using Python turtle.
- Use Python to implement interactions
- Put the game into HTML framework
- Testings

Key components:

- Game design

- Python event handler for keyboard
- Divide the game scenes
- Python graphics (moving)
- Html structure

Timeline:

Week of 4/3: Basic game idea development; key component review

Week of 4/10: Graphics design, event handle, initial architecture diagram, finish all the game scenes design

Week of 4/17: Create graphics for every scene, put them into the html framework

Week of 4/24: Demo preparation, connect all the components

Week of 5/2: Finalize system, write up docs

Potential issues:

As a project with educational purpose, our game may seem boring to some players. How can we improve that?
Solution:
In addition to printing out texts, we should find more interactive way to display information and to make players full involved in the whole process. We can design more movement of objects and probably some pop-up quizzes to improve the gameplay.

How to implement graphics?
Solution:
We will make use of python libraries to implement the graphics. Our first choice is python turtle and our back-up plan is python graphics.