## **Project Requirements**

- 1. The game will be a collection of replayable typing minigames
  - a. The game will take place in an old colony town or Plymouth Plantation
  - b. The user will interact with NPCs to play typing minigames
  - c. All minigames will be single player
- 2. The game will follow Massachusetts History and Social Science Framework
- 3. The user should be able to open a settings menu, pausing the active game
  - a. Adjust volume
    - i. Displayed as horizontal bar that can be decreased or increased by pressing left or right arrow keys
  - b. Exit game
  - c. Select different options by pressing up or down arrow keys
- 4. The user should be able to control their character with a keyboard
  - a. Different keys correspond to different actions
    - i. W or up arrow to move up
    - ii. A or left arrow to move left
    - iii. S or down arrow to move down
    - iv. D or right arrow to move right
    - v. ESC to open settings menu
- 5. The user should be able to select different difficulty levels
  - a. Difficulty levels are independent to each minigame
  - b. They can change the difficulty before minigame
  - c. 3 levels: easy, medium, and hard
  - d. Each difficulty has different vocabulary
- 6. Different kinds of minigames
  - a. Racing Game
    - i. The user will engage in a typing race against npc
      - 1. Players must enter text to match displayed text with exact spelling, punctuation, and capitalization
      - 2. Easy Difficulty
        - a. Simple (4th grade) vocab, slow npc speed
      - 3. Medium Difficulty
        - a. Average (5th grade) vacab, reasonable npc speed
      - 4. Hard Difficulty
        - a. Complex (6th Grade) vocabulary and fast npc speed
    - ii. If player fails, they may try again
    - iii. Player receives score based on completion speed and difficulty
  - b. Vocab Game
    - i. Easy Difficulty
      - 1. The user will be shown a definition and have to pick the word from a list
    - ii. Medium Difficulty
      - 1. The user will be displayed a word and definition, then shown a definition and be required to type the word
    - iii. Hard Difficulty

- 1. The user will be shown a word and definition, then shown a word and be required to type it's definition
- c. Quiz Game
  - i. The game will finish after time expires
    - 1. Easy Difficulty
      - a. Player must guess the state from its shape
    - 2. Medium Difficulty
      - a. Matching states to their capitals by typing capital or state corresponding to displayed text
    - 3. Hard Difficulty
      - a. When shown the shape of a state the player must type the state name and it's capital
  - ii. Time limit of two minutes, score is based on how many correct answers are given
- 7. The user should be able to view a score board containing various statistics
  - a. Controlled character interacts with poster in town to view
  - b. The user's high scores in different games
  - c. Their number of games completed
  - d. Average and top speed of racing game for each difficulty