CBL project backlog – Ron Peer and Lavi Batzia – "mapPIN"

Introduction:

Our proposed game is a geographic locator quiz, where you choose between a few modes of play

1. Find a country on the world map
2. Find a city on the world map
3. Find the country based on a flag

Topics of choice:

1. File management (accessing image files, storing and accessing data)
2. Git (Version Control)
3. User Experience - Image analysis/Timer/Algorithms

Backlog Items (sorted by development significance):

Name: Data storage and access

How to demo: files containing space delimited data. Data includes city names, locations, flag image file locations and country. During program execution, necessary data will be queried from the relevant files. Files can be found in the folder containing the game.

Name: Render game starting state

How to demo: Once the game starts, load the 4 elements to the new window – the world map as an image, a timer, the name of the current player, and the name of the location to find. Can be resized when window resolution is changed.

Name: Mouse object

How to demo: At the starting phase, clicking the buttons on screen will lead to next screen. During the game, a click on the screen will stops the timer and initiate score calculation/country identification with the coordinates of the clicking action.

Name: Mode Selection Screen

How to demo: Render a screen with buttons representing the different game modes, that when pressed will transfer you to the start of a game.

Name: Transfer Turns Between players

How to demo: Once a player has made their choice and the score has been calculated, it is shown on the screen and then a new game starting state is loaded for the next player in line. New player's name will be reflected on the screen.

Name: Timer object

How to demo: Tracks the time of each round and displays a countdown on the screen. When triggered by a mouse click event, stops the countdown and sends the time score.

Name: Image analysis – country mode

How to demo: When a click event of the mouse is caught in this game mode, the coordinates of the mouse along with the time interval from the timer will be used to identify on which country the mouse has landed on and send the score to be displayed on the intermediatory screen. This will also be the method used when given either the name of a country or its flag.

Name: Distance calculation – city mode

How to demo: When an event of the mouse is caught during the game, the coordinates of the mouse along with the time interval from the timer will be used to calculate distance between the mouse and city of the round. The score will be sent to be displayed on the intermediatory screen.

Name: Game over screen

How to demo: After all rounds are over the last screen loads containing a breakdown of overall score for both players and winner are declared.

Name: player object

How to demo: At the start of the game, each player could choose their name, and a color to be represented by. During each of the players turn in the game, no matter what the mode is, their name will be displayed on screen. At the ending screen of the game, all player scores will also be displayed, as well as a score total.

Integrated learning concepts:

File management: Data will be read from the files – cities name file, images of flag, coordinates of cities. Data will also include file locations necessary for the game to be played, or locations to create files if necessary.

Version Control:

Version control systems (Such as Git) can be used during development to allow for simultaneous work without interference.

User Experience:

Integration of concepts such as timers, turn based gameplay, scores and visual feedback will enhance the user experience while playing the game.