**Final Project**

**CS110 – Spring 2016**

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Requirements Analysis:

* Main Menu
* Levels selection
* Settings:
  + Audio
  + Change color scheme
* Animated players

Object Oriented Design:

* Player
  + Private members: Sprite, Texture, SpriteSheet, currentLocation
  + Public members: GetPosition, SetDirection, SetPosition, Move, Initializer
* Box
  + Private members: Sprite, texture, SpriteSheet, currentLocation
  + Public members: collide (function to tell if the box can move in the specified direction or not), getPosition, setPosition, move, initializer, DestinationLocation (It’s a property, not a function, that is true only if the box is in one of the destinations), idealLocation (Property, that is defined via the map file and states the best location for the box to be at), wallCheck
* Destination
  + Private members: x, y (locations of a destination that are received via the map file of the level)
  + Public members: Initializer, getPosition, setPosition
* Wall
  + Private members: x, y (locations of a piece of brick)
  + Public members: Initializer
* Level
  + Private members: MaxWidth, maxHeight, winningSteps
  + Public members: drawWall, drawObstacle ( draws a small brick that is a piece of wall in the array), drawHero, drawBoxes, setWinningSteps, getWinningSteps
* Window
  + Private members: maxWidth, maxHeight
  + Public members: drawBackground, initializer