“Five Guys” Team Meeting 1 – 9/27/19

ATTENDEES: Rob, Qui, Afnan, Cole

LOCATION: Spahr Auditorium (Eaton 2)

* Need to figure out documentation method
* Team meetings can occur via Discord or in-person
* Afnan, Beau, and Rob will focus on AI portion of project
* Qui, Cole, and Cameron will focus on implementing new features into the project
  + Qui is likely going to be adding a scoring system
    - Hit percentage
    - Miss percentage
* Need to familiarize ourselves with the code-base we have inherited
* Need to familiarize ourselves with Python3.7.4 and PyGame
* Need to fix the inherited code-base to adhere to traditional rules of Battleship
  + Player should NOT get to attack repeatedly after hitting an opposing players ship

“Five Guys” Team Meeting 2 – 9/30/19

ATTENDEES: Rob, Qui, Afnan, Beau

LOCATION: Spahr Auditorium (Eaton 2)

* New additions/features + confirmation with Dr. Gibbons (COMPLETED)
  + Qui : Scoreboard
  + Cole : If you sink a ship, you can move one of your ships (BE CAREFUL TO NOT RUIN A GAMEBOARD)
  + Cameron : Sound Effects (MAKE SURE TO HAVE WORKS CITED)
  + Afnan : Special Shot (Nuke / 3x3 attack)
* Talk with group about when we can meet in-person and our upcoming schedules
  + Beau is gone 10/11-10/13
  + Afnan is gone 10/11-10/15
  + Qui is studying for exams (no vacation)
  + Rob has not made plans yet (might go on vacation)
* Need to familiarize ourselves with the code-base we have inherited
* Need to familiarize ourselves with Python3.7.4 and PyGame
* Need to fix the inherited code-base to adhere to traditional rules of Battleship
  + Player should NOT get to attack repeatedly after hitting an opposing players ship
* AI will use new game-state (Rob, Beau, Afnan)
  + EasyAI / MediumAI / HardAI
* ALL : Fix game rules
  + should NOT get to fire again after getting a successful HIT

“Five Guys” Team Meeting 3 – 10/2/19

ATTENDEES: Rob, Qui, Beau, Cole

LOCATION: Spahr Auditorium (Eaton 2)

* Talk with group about when we can meet in-person and our upcoming schedules
  + Beau is gone 10/11-10/13
  + Afnan is gone 10/11-10/15
  + Qui is studying for exams (no vacation)
  + Rob has not made plans yet (might go on vacation)
* Need to familiarize ourselves with the code-base we have inherited
* Need to familiarize ourselves with Python3.7.4 and PyGame
* Need to fix the inherited code-base to adhere to traditional rules of Battleship
  + Player should NOT get to attack repeatedly after hitting an opposing players ship
* AI will use new game-state (Rob, Beau, Afnan)
  + EasyAI / MediumAI / HardAI
* ALL : Fix game rules
  + should NOT get to fire again after getting a successful HIT
* Afnan, Beau, and Rob come to lecture on Friday with an understanding of our inherited code-base so that we can start to plan what we have to do.
* Qui will be at Engineering from 11am-6pm tomorrow
* Let’s get some work done on Friday (PLANNING)
* Make UML Class-Diagram for each file in the inherited code-base
* FRIDAY FUN DAY ON 10/4
  + TEAM BASED ACTIVITY

“Five Guys” Team Meeting 4 – 10/7/19

ATTENDEES: Rob, Qui, Beau

LOCATION: Spahr Auditorium (Eaton 2)

* Talk with group about when we can meet in-person and our upcoming schedules
  + Beau is gone 10/11-10/13
  + Afnan is gone 10/11-10/15
  + Qui is studying for exams (no vacation)
  + Rob will be in Overland Park/Lawrence for Fall Break
* Began laying out plans for how to implement AI w/ Game States
* Python3.7.4 and PyGame
  + Inherited project runs poorly on Mac 🡪 Runs GREAT on Windows machines
* AI will use new game-state (Rob, Beau, Afnan)
  + EasyAI / MediumAI / HardAI
    - Basic algorithm designs discussed
* FIX INHERITED CODE-BASE:
  + If player hits, then they get to keep firing until they miss
    - FIXED THIS ISSUE THEN...
      * If player misses, then they get to fire again
        + FIXED THIS ISSUE
* Discussed questions we had about the code-base between each other
* Qui began working on the Score Board
  + Formulas created
  + Basic display of Score Board discussed

“Five Guys” Team Meeting 5 – 10/9/19

ATTENDEES: Rob, Qui, Beau, Afnan

LOCATION: Spahr Auditorium (Eaton 2)

* Talk with group about when we can meet in-person and our upcoming schedules
  + Beau is gone 10/11-10/13
  + Afnan is gone 10/11-10/15
  + Qui is studying for exams (no vacation)
  + Rob will be in Overland Park/Lawrence for Fall Break
* Python3.7.4 and PyGame
  + Inherited project runs poorly on Mac 🡪 Runs GREAT on Windows machines
* AI will use new game-state (Rob, Beau, Afnan)
  + EasyAI
    - randomly generate I and J (ROW/COL) between 0 and 8
    - follow trackRects from “if isPoint...” on down
  + MediumAI
    - if(globalShipHitsAI is not null)
      * use fireAdjacent function to generate ROW and COL to fire on
      * if HIT
        + if SUNK

globalShipHitsAI = remove coordinates of ONLY the sunk ship

globalShipMissAI = null ???

* + - * + else

add coordinate to globalShipHitsAI

* + - * if MISS
        + add coordinate to globalShipMissAI ???
    - else
      * fire randomly
      * if HIT
        + add coordinate to globalShipHitsAI
  + HardAI
    - simple, just need to decide on order of hits (randomly hits ships? or goes smallest to largest?)
* Discussed questions we had about the code-base between each other
* Rob added the buttons to the welcome screen for VS EASY AI, VS MEDIUM AI, and VS HARD AI (clickable as well)
  + USE GAME STATES TO HANDLE AIs
* Created new functions:
  + trackRectsHuman
  + trackRectsAI
  + printRectsHuman
  + printRectsAI
  + trackPlayButton\_AI
  + setUpPlaceBoatsAI

“Five Guys” Team Meeting 6 – 10/16/19

ATTENDEES: Rob, Qui, Beau, Afnan, Cole, Cameron

LOCATION: Spahr Auditorium (Eaton 2)

* Python3.7.4 and PyGame
  + Inherited project runs poorly on Mac 🡪 Runs GREAT on Windows machines
* AI will use new game-states (Rob, Beau, Afnan)
  + EasyAI
    - randomly generate I and J (ROW/COL) between 0 and 8
    - follow trackRects from “if isPoint...” on down
  + MediumAI
    - if(globalShipHitsAI is not null)
      * use fireAdjacent function to generate ROW and COL to fire on
      * if HIT
        + if SUNK

globalShipHitsAI = remove coordinates of ONLY the sunk ship

globalShipMissAI = null ???

* + - * + else

add coordinate to globalShipHitsAI

* + - * if MISS
        + add coordinate to globalShipMissAI ???
    - else
      * fire randomly
      * if HIT
        + add coordinate to globalShipHitsAI
  + HardAI
    - simple, just need to decide on order of hits (randomly hits ships? or goes smallest to largest?)
* Cameron and Cole will be working together to implement Sound Effects
  + Either find and cite free, open-source sounds from online OR create your own sound effects
    - Make sure to include citation information if sounds are taken from online
* Afnan, Beau, and Rob will work on implementation of AI and AI testing throughout next few days
* Qui made progress on GUI scoreboard
* Bug fixes made to how the game runs
  + More bugs created in the process

“Five Guys” Team Meeting 7 – 10/18/19

ATTENDEES: Rob, Qui, Beau, Afnan

LOCATION: Spahr Auditorium (Eaton 2) & Fishbowl

* Python3.7.4 and PyGame
  + Inherited project runs poorly on Mac 🡪 Runs GREAT on Windows machines
* Cameron and Cole will be working together to implement Sound Effects
  + Make sure to include citation information if sounds are taken from online
* AI team (Beau, Afnan, Rob) meeting up today at about 4PM to fully implement AI and test the AI functionality
  + Will also work on bugs as we find them
    - AI is continually firing (extra loop)
    - Scoreboard is not updating properly anymore
* Austin has been making progress on Medium AI function fireAdjacent()
  + it’s been a difficult task... Ran ideas for his implementation by Beau and Rob
  + Austin pushed fireAdjacent() to master branch
    - for coord in reversed(shipHitsAI):
      * if(aboveCoord is on board and has not been shot at)
        + return aboveCoord
      * elif(rightCoord is on board and has not been shot at)
        + return rightCoord
      * elif(bottomCoord is on board and has not been shot at)
        + return bottomCoord
      * elif(leftCoord is on board and has not been shot at)
        + return leftCoord
    - if fireAdjacent is called, you already know that it WILL find a good place to shoot at
    - shipHitsAI = [(x\_1, y\_1), (x\_2, y\_2), ...]
* As of 530PM today, Human vs Human, Human vs AI (all difficulties) are functional and mostly tested
  + Documentation API was discovered and documentation has been written for the new functions we implemented
    - Afnan will download Sphinx Documentation API (<https://www.sphinx-doc.org/en/master/usage/quickstart.html>) as well as update the Docs files to reflect the new function documentation
  + showboatHuman was implemented and fixed
  + Scoreboard bug was fixed
  + Initial testing of Human VS Easy AI went great, no issues at all
  + Initial testing of Human VS Medium AI went well, no obvious issues
  + Initial testing of Human VS Hard AI went well, no issues at all
* Cameron and Cole still need to implement sound effects
  + Works Cited text file!!

“Five Guys” Team Meeting 8 – 10/20/19

ATTENDEES: Afnan, Beau, Cameron, Cole, Qui, Rob

LOCATION: Remote (Via Phone)

* Cameron and Cole implemented sound effects they found online into the game:
  + placing boats
  + changing players/turn
  + miss
  + hit
    - victory sound was playing on repeat so decided to not implement due to inability to prevent game states from always looping during the game
* Works Cited for the new sound effects files has been included in the Docs/WorksCited.txt file
* Documentation was completely finished last night by Afnan and Rob
* All testing so far has not uncovered any bugs with the program... further testing would be smart just for safety
  + game is 100% playable in all 4 game modes