# Team FooBar()

# Team Participation

Version 2.0

# **Taylor Venissat**

Team Leader

### Tasks/Responsibilities

- Bugs/Crashes
  - o Fix/bugs/crashes from Version 1.0
- Synonymous go functions
  - o Allow user to input synonymous functions for "go" including: up, down, north, south, east, west
- Next A\* coordinates \*
  - o Write function to return the next coordinates in the A\* algorithm
- Next BFS/DFS coordinates \*
  - Write function to return the next coordinates in the Breadth First Search and Depth First Search algorithms
- Enemy placement
  - o Determine where the enemies should be placed at start of game
- Replay system user interface
  - o Implement the basic design of the replay system interface
- Relay system commands
  - o Implement the commands for using the replay system
    - Use pause
    - Use resume
    - Go back number
    - Go forward number
    - Use stop
    - Go faster
    - Go slower
- Create replay file
- List replay files
- File extension for replay files \*
- Maze generation
  - o Implement a new maze generation algorithm
- Repeated action
  - o Implement the ability for user to hold down backspace key to repeat action
- Field of View
  - o Implement a system that shows a minimized view around the player
- Test software
  - o Play the game, make sure it functions properly
- Risk management document
- Team report

## Team Meeting Attendance

• Taylor Venissat attended 100% of meetings and left early/arrived late for 0% of those meetings.

# **Phuong Ho**

# Designer/Developer

### Tasks/Responsibilities

- Encryption algorithm
  - o Implement the simple Caesar Cipher algorithm for file encryption/decryption
- Main menu/Title screen
  - o Design the main menu/title screen interface
- Custom art assets
  - Design custom art to use for game graphics
    - Open door
    - Closed door
    - Open chest
    - Closed chest
    - Key
    - Player avatar
    - Simple enemy
    - Smart enemy
    - Wall tiles
    - Floor tiles
- Enhance GUI
  - Add on to the basic UI for a better look and feel and ultimately a better user experience
- Develop test cases \*
- Test software
  - o Play the game, make sure it functions properly
- Risk management document
- Team report

### Team Meeting Attendance

Phuong Ho attended 100% of meetings and left early/arrived late for 0% of those meetings.

# **Zackary Hermsen**

## Developer

### Tasks/Responsibilities

- Encryption decision logic
  - o Implement the function for handling file encryption/decryption
- Hard-coded encryption
  - o Hard code a simple but unique encryption for files
- Enemy interaction \*
  - o Add enemy interactions
- Help output/prompts
  - o Enhance the UX by adding helpful output/prompts for the user
- Develop test cases \*
- Test software
  - o Play the game, make sure it functions properly
- Risk management document
- Team report

#### **Team Meeting Attendance**

• Zackary Hermsen attended 100% of meetings and left early/arrived late for 0% of those meetings.

## **Garrett Benoit**

Developer/Database Administrator

### Tasks/Responsibilities

- Database
  - Implement basic database functionality
    - Store replay
    - Signup/Login
    - Exception handling
  - Leaderboard
    - Implement a leaderboard for showing the top ten user's scores
- Test software
  - o Play the game, make sure it functions properly
- Risk management document
- Team report

## Team Meeting Attendance

• Garrett Beniot attended 100% of meetings and left early/arrived late for 0% of those meetings.

## **Chance Johnson**

Designer/Developer

## Tasks/Responsibilities

- Encryption algorithm
  - o Implement the complex AES algorithm for file encryption/decryption
- Sound system
  - o Add music and sounds to enhance the user experience
- Login screen
  - Design a basic login screen
- Test software
  - o Play the game, make sure it functions properly
- Python documentation
  - Make sure code is properly documented and construct a document that makes sense of the Python code
- UML diagrams \*
  - Generate UML diagrams
- GanttChart
  - Maintain and update the project GanttChart file
- Work breakdown structure document
  - o Update the work breakdown structure document
- Team participation document
  - Update the team participation document
- Risk management document
  - o Compile all risk submissions from other teammates and construct the risk management document
- Team report
  - o Compile all submissions from other teammates and construct the team report document
- Lagniappe document
  - o Construct a document that clearly lists the lagniappe additions of the project
- Bonus document
  - o Construct a document that clearly lists what was done for bonus points
- Final submission
  - o Compile all project files and submit Version 2.0

#### Team Meeting Attendance

• Chance Johnson attended 100% of meetings and left early/arrived late for 5% of those meetings.

# Team FooBar()

# **Team Participation**

Version 1.0

# **Taylor Venissat**

Team Leader

## Tasks/Responsibilities

- Setup/Plan
  - Establish the language and tools to use for the project
  - o Setup the GitHub repository
  - Setup the project file
- Random Maze Generation
  - o Implement the algorithms for random maze generations
- Variable-Length Go Command
  - o Edit 'go' command to allow user to go a variable length
- Field-of-View System
  - o Add the field-of-view functionality to only show a portion of the maze
- Marker System
  - o Implement the marker to mark a user-specified location in the maze
- Chest Combination System
  - o Implement the combo tiles and combination lock on the chest
- Log File
  - o Implement the log file for recording execution data
- Game Over Condition
  - o Implement the condition for ending the game
- Submission Report
  - o Provide answers to the questions stated in the requirements to complete the report

# **Phuong Ho**

# Designer/Developer

### Tasks/Responsibilities

- Rendering of Objects
  - o Implement the rendering of the objects needed for the maze
- Develop Test Cases
  - o Implement test cases in the unit testing suite to test the game
- Quick Pathfinder
  - o Implement 2 quick pathfinder algorithms for the smart enemy movement reliability
- Design Closed Chest
  - o Design closed chest graphic for use in the maze
- Design Open Chest
  - o Design open chest graphic for use in the maze
- Submission Report
  - o Provide answers to the questions stated in the requirements to complete the report
- Design Closed Door \*
  - o Design closed door graphic for use in the maze
- Design Open Door \*
  - o Design open door graphic for use in the maze
- Design Key \*
  - Design key graphic for use in the maze

# **Zackary Hermsen**

## Developer

## Tasks/Responsibilities

- Optimal Pathfinder
  - Implement an optimal pathfinder algorithm to find the best path for solving the maze and for the smart enemy movement reliability
- Develop Test Cases
  - o Implement test cases in the unit testing suite to test the game
- Custom Output for Invalid Input
  - o Provide custom/helpful output to hint to the user that their input was invalid
- Submission Report
  - o Provide answers to the questions stated in the requirements to complete the report

# **Garrett Benoit**

## Developer

## Tasks/Responsibilities

- Random Enemy
  - o Implement a dumb enemy that randomly walks around the maze
- Smart Enemy
  - o Implement a smart enemy that uses pathfinding algorithms to determine its moves
- Enemy Movement Reliability
  - Use redundancy & diversity (N-version programming) with the pathfinding algorithms to build reliable enemy movement
- Submission Report
  - o Provide answers to the questions stated in the requirements to complete the report

# **Chance Johnson**

# Designer/Developer

### Tasks/Responsibilities

- Player Commands
  - o Implement the go, use, grab, open player commands
- Design Combination Tiles
  - o Design 10 floor tiles for use with the combination system
- Develop Test Cases
  - o Implement test cases in the unit testing suite to test the game
- Work Breakdown
  - o Organize the work breakdown structure in a clear, effective document
- Submission Report
  - o Provide answers to the questions stated in the requirements to complete the report
  - o Compile all team member answers and create the Report document
- Version I Submission
  - Design, organize, and compile all assets and documents needed for the Version I submission and submit Version I Project
- Design Avatar \*
  - Design the graphic for the player avatar
- Design Game Icon \*
  - Design the graphic for the game icon

<sup>\*</sup> Denotes a task not completed