

# Team FooBar()

## Team Participation

Version 2.0

### **Taylor Venissat**

*Team Leader*

#### Tasks/Responsibilities

- Bugs/Crashes
  - Fix/bugs/crashes from Version 1.0
- Synonymous go functions
  - Allow user to input synonymous functions for “go” including: up, down, north, south, east, west
- Enemy placement
  - Determine where the enemies should be placed at start of game
- Replay system user interface
  - Implement the basic design of the replay system interface
- Relay system commands
  - 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
  - Implement a new maze generation algorithm
- Repeated action
  - Implement the ability for user to hold down backspace key to repeat action
- Field of View
  - Implement a system that shows a minimized view around the player
- Test software
  - 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
  - Implement the simple Caesar Cipher algorithm for file encryption/decryption
- Main menu/Title screen
  - 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 \*
- Risk management document
- Team report
- Next BFS/DFS coordinates \*
  - Write function to return the next coordinates in the Breadth First Search and Depth First Search algorithms

### Team Meeting Attendance

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

## Zackary Hermesen

*Developer*

### Tasks/Responsibilities

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

### Team Meeting Attendance

- Zackary Hermesen 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
  - Play the game, make sure it functions properly
- Risk management document
- Team report

### Team Meeting Attendance

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

## Chance Johnson

Designer/Developer

### Tasks/Responsibilities

- Encryption algorithm
  - Implement the complex AES algorithm for file encryption/decryption
- Sound system
  - Add music and sounds to enhance the user experience
- Login screen
  - Design a basic login screen
- Test software
  - 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
  - Update the work breakdown structure document
- Team participation document
  - Update the team participation document
- Risk management document
  - Compile all risk submissions from other teammates and construct the risk management document
- Team report
  - Compile all submissions from other teammates and construct the team report document
- Lagniappe document
  - Construct a document that clearly lists the lagniappe additions of the project
- Bonus document
  - Construct a document that clearly lists what was done for bonus points
- Final submission
  - 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
  - Setup the GitHub repository
  - Setup the project file
- Random Maze Generation
  - Implement the algorithms for random maze generations
- Variable-Length Go Command
  - Edit 'go' command to allow user to go a variable length
- Field-of-View System
  - Add the field-of-view functionality to only show a portion of the maze
- Marker System
  - Implement the marker to mark a user-specified location in the maze
- Chest Combination System
  - Implement the combo tiles and combination lock on the chest
- Log File
  - Implement the log file for recording execution data
- Game Over Condition
  - Implement the condition for ending the game
- Submission Report
  - Provide answers to the questions stated in the requirements to complete the report

## Phuong Ho

*Designer/Developer*

### Tasks/Responsibilities

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

## **Zackary Hermesen**

*Developer*

### Tasks/Responsibilities

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

## **Garrett Benoit**

*Developer*

### Tasks/Responsibilities

- Random Enemy
  - Implement a dumb enemy that randomly walks around the maze
- Smart Enemy
  - 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
  - Provide answers to the questions stated in the requirements to complete the report

## **Chance Johnson**

*Designer/Developer*

### Tasks/Responsibilities

- Player Commands
  - Implement the go, use, grab, open player commands
- Design Combination Tiles
  - Design 10 floor tiles for use with the combination system
- Develop Test Cases
  - Implement test cases in the unit testing suite to test the game
- Work Breakdown
  - Organize the work breakdown structure in a clear, effective document
- Submission Report
  - Provide answers to the questions stated in the requirements to complete the report
  - 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

\* Denotes a task not completed