**Software Implementation and Testing Document**

**For**

**Group 4**

Version 1.5

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# Programming Languages

*List the programming languages use in your project, where you use them (what components of your project) and your reason for choosing them (whatever that may be).*

* Java
  + Java was chosen because most of the members of our group are familiar with it and it’s graphics and cross-platform features are perfect for our game. We also would like to expand our knowledge on the language and become more familiar with the graphics interface. This is being used for the game portion of the project.
* Javascript
  + Javascript was chosen to add parallax open source libraries to our website. Parallax is motion effects that make the website more interactive to the user. As of now, we have only used it to initialize the motion effects for our website in the Main.js file. Inline Javascript has also been used to include the Bootstrap containers. This was the easiest way of implementing the Bootstrap. More javascript may be added in the future to make the website more interesting.
* CSS/HTML
  + While not “programming languages” we have used them to build the framework of the website. Along with imported bootstrap classes, these languages are located within our several html files. The CSS has its own main file to be shared with all the web pages. We chose them because they are a standard for website development. Bootstrap CSS classes were used to make the website look nicer and more professional.

# Platforms, APIs, Databases, and other technologies used

*List all the platforms, APIs, Databases, and any other technologies you use in your project and where you use them (in what components of your project).*

* Java Swing
  + We used the Java Swing toolkit for implementing the graphics in the game portion of the project. This is used in the main game class to set up the window and draw the character and walls in the displayed room.
* AWS
  + We have used the AWS S3 bucket to host our static website. This located on Stephen Johnson’s personal AWS account. The website code is located within the website branch on github.
* Bootstrap
  + We have used Bootstraps open source libraries to help create some of the websites container classes. The container classes are in the divs of the html files. The places we’ve included the libraries in are linked at the top and bottom of the html files.

# Execution-based Functional Testing

*Describe how/if you performed functional testing for your project (i.e., tested for the* ***functional requirements*** *listed in your RD).*

# Execution-based Non-Functional Testing

*Describe how/if you performed non-functional testing for your project (i.e., tested for the* ***non-functional requirements*** *listed in your RD).*

# Non-Execution-based Testing

*Describe how/if you performed non-execution-based testing (such as code reviews/inspections/walkthroughs).*