Team 20 Project Charter
Controlled Chaos

Team Members:
Karina Abraham, Bolun Zhang, Cameron Hofbauer, Javad Baghirov, Zayden Newquist, Jack Wagner

Problem Statement:
The goal of this project is to make an entertaining game that balances a curated experience and randomly generated content. Our game will feature the core tenets of a roguelike game, including randomly generated levels, enemy encounters, and item discoveries. Our game will be different from other games by incorporating themes of randomness in the level design/artwork and having dynamic item functions that are discovered and documented in-game by the players themselves.

Project Objectives:
1. Develop an engine in order to run the game, including player movement and enemy scripting.
2. Design levels that are randomly combined to generate unique map layouts.
3. Create and randomize a variety of items, enemies, and settings to keep gameplay dynamic and unique between playthroughs.
4. User progress saved between playthroughs, including permanent unlocks of items to be found in later attempts.

Stakeholders:
Users: Typical users include people of all ages who enjoy playing games that are unpredictable in nature and require problem-solving.
Developers: Karina Abraham, Bolun Zhang, Cameron Hofbauer, Javad Baghirov, Zayden Newquist, Jack Wagner
Scrum Master: Jack Wagner
Project Coordinator: Jayanta Mukherjee
Project Owners: Karina Abraham, Bolun Zhang, Cameron Hofbauer, Javad Baghirov, Zayden Newquist, Jack Wagner

Project Deliverables:
- Build a game engine in Java using the LWJGL framework to handle game functions such as…
    - Player movement
    - Level advancement
    - Item unlocks
    - Item description input

- Engineer a level-generation algorithm which produces levels of randomly-generated rooms.
- Develop enemy scripting to keep gameplay well-telegraphed yet challenging.
- Design game visuals, like characters, items, and stages, rendering them using OpenGL.
- Add sound effects and background music using the OpenAL framework.
- Implement a system that will save user progress in JSON files.