1. Introduction
   1. Purpose.
      1. The purpose of this document is to give the vision for the Clue-Less video game project by outlining the need for the project, user and stakeholder (non-user) interests, and providing an overview of how the product fulfills these.
   2. Scope.
      1. This document is limited in application to only the development of the Clue-Less application by the “Undecided” project team and other participants in this project.
   3. References
      1. Johns Hopkins Java Coding Style
      2. Johns Hopkins Group Project Assignment statement for course EN605.601.83
      3. Game Rules. In order to ensure consistent implementation of the game rules, the project team will use the rules posted at <http://www.boardgamecapital.com/clue-rules.htm>
2. Positioning
   1. Business Opportunity
      1. Video games are a continually growing industry with new genres appearing occasionally. One such genre is video game implementations of classic board games. These are called “adaptations” and are very common in the gaming industry.
      2. For this particular project, because we do not intend to purchase licensing rights, there is no opportunity to monetize the application.
   2. Problem Statement
      1. Logistics. A common problem for board gamers (tabletop gamers) is that you physically have to meet to play a game. Although this is what they like to do, sometimes the logistics make this not feasible. It may be difficult to find enough people to play. Even if you can find them, you have to meet at a location, so more time and money are required.
      2. A successful Solution. If there were an option for people to “meet” online and play board games, that would alleviate this problem for these gamers and allow more people who enjoy games to “meet” online and participate in their hobby. They would have access to more fun at a lower cost.
   3. Product Position Statement
      1. This product is intended for gamers who want to play board games with other people (not AI) but want to remove the difficulty of gathering partners physically in a location to do so. The product will solve this problem by providing a way to play via network and allowing them to play with a wider pool of potential This is unlike the classic version of the board game Clue due to the ability to play via network.
3. Stakeholder and User Descriptions
   1. Market Demographics
      1. The global gaming market is expected to be worth more than $150 billion in 2019. Within this large market, PC games will account for more than $35 billion. (<https://newzoo.com/insights/articles/the-global-games-market-will-generate-152-1-billion-in-2019-as-the-u-s-overtakes-china-as-the-biggest-market/>) The board game adaptation share of this market size is hard to determine, but the “pie” it draws from is definitely large.
   2. Stakeholder Summary
      1. Users
         1. This group represents players of the game, whether child or adult.
         2. This stakeholder will shape how the connection procedure, GUI and game play are implemented so that they are “user-friendly.”
      2. Parents
         1. This group represents guardians responsible for the users, particularly when the users are minor children.
         2. This stakeholder will shape the game invitations and the terminology used in game feedback.
      3. Hosting Sites
   3. User Summary
      1. One general user type is considered in this vision document. That is, a user is older than 8 and is capable of understanding how to connect to a hosted game.
      2. This user and capability level will influence how we implement remote connection procedures. They must be simple and clear enough that a general user with no particular computer skills (as is our assumption) can access and complete gameplay without undue difficulty.
   4. User Environment
      1. The user environment is a personal computer with no assumptions other than it has Java installed and is capable of connecting to the internet.
      2. There can be no other applicable work cycle, time, or other environmental assumptions about the user for this application.
   5. Stakeholder (non-user) Profiles
      1. The non-user stakeholder:
      2. The non-user stakeholder will be satisfied if:
         1. All users are able to play the game
         2. The process of organizing a game is easier than the classic
   6. User Profiles
      1. The general user is:
         1. Age 8 or older
         2. Has no particular computer skills but can follow simple, clear instructions
         3. Enjoys board games, but seeks a less logistically involved way to play
      2. The user will be satisfied if:
         1. The Clue-Less experience is an approximation of the classic board game
         2. The process of organizing a game is easier than the classic due to the elimination of co-locational constraints
         3. The time required to play the game is less than the classic
         4. The game play is logical and easy-to-follow
   7. Key Stakeholder Goals / Needs
   8. User Goals / Needs
      1. The user’s main concern of simplifying the gathering and playing process will be met through the development of this application as long as it is easier, faster, and at least as logical as the classic board game.
4. Product Overview
   1. Product Perspective.
      1. Clue-Less will be a multi-player game that allows users to create and join games remotely using an internet connection.
   2. Assumptions and Dependencies
      1. This application will require that users have Java installed on their devices.
      2. This application will require an internet connection.
      3. This application will require that users can communicate outside of the application in order to arrange a session of play.
      4. This application will require at least three players, each with his own device to play a game.
5. Product Features
   1. Remote Connection capability
      1. Remote connection capability will allow users to “meet” online without having to physically relocate
   2. In-Game Message Broadcast System
      1. An in-game message broadcast system will facilitate the flow of gameplay
   3. Graphical User Interface Do we want to say text-based or GUI?
      1. A GUI will provide a Clue approximation by using Clue artwork to simulate a board game experience.
      2. The GUI will also simulate features and actions of the classic board game such as moving.
   4. “Dream” Features
      1. Custom User Defined Character Names and Images will allow users to create a more personal gaming experience.
      2. Sound effects will enhance the mood (suspense, surprise, drama, etc.) of the gaming experience.
6. Constraints
   1. Player Movement
      1. The problem statement found in the clueless.pdf document provided by the course instructors has constraints on movement that must be followed.
   2. Connectivity and Communications
      1. Usability constraints are also found in clueless.pdf. These are:
         1. Each player should access the game from a separate computer, with a graphical user interface.
         2. Each time the game state changes (a person is moved, a suggestion is made, a player disproves a suggestion, or a player is unable to disprove a suggestion) all players should be notified.
         3. You should document the message interfaces between the clients and the Clue-Less server in your software requirements specification document. There will be messages from a client to the server, messages from the server to a specific client, and broadcast messages to all clients from the server.
         4. These messages should be considered as triggers for use cases at the subsystem (client or server) level.