

## **CS 3110 Final Project Charter**

**Team Members:** Matthew Barker (mjb485), Austin Astorga (aaa332), Jordan Greissman (jag538), David Udelson (dru5)

### **Meeting Schedule**

**Design and Planning Stage:** Wednesday at 9:15 PM & Friday at 2:30 PM, both in Duffield

**Implementation Stage:** same dates as above, plus Monday at 5 PM and more as needed

### **System Proposal**

#### **Civilization-like Game (Working Title: Gobi)**

- Overview
  - We plan to make a text-based game similar to Sid Meier's Civilization. Our key feature is a procedurally generated map that will be displayed through ASCII art.
- Key Features
  - ASCII Graphics
  - Procedural Map Generation
  - Text-based Interaction
  - Variable Difficulty AI
  - Multiplayer (if possible)
- Narrative Description
  - ASCII Graphics
    - We will rely on an intuitive graphical interface to concisely and elegantly display relevant information in a logical hierarchy to the player. The map will clearly indicate what commands will provide more detail, and a basic display will indicate significant actions, events, resources, and statistics.
  - Core Gameplay
    - Players start with a single city, a worker, and a scouting unit. Players can then explore the map and collect resources on the map using their units. Players also choose to research different buildings, technologies, and units in order to upgrade their civilization. They can also found new cities to expand their view of the map and increase their resource collection rates. When new civilizations (other players) are discovered, players can choose to ignore them or fight. Fighting takes place as a random number generator with weights depending on the units fighting. The game ends when either enough turns have been played, only one civilization remains, or one player has researched a final technology.
  - Procedural Map Generation
    - Every game will have a map randomly generated.
  - Text-based Interaction
    - Along with an elegant display of the current map, the user will be able to play the game through text-based interaction. This allows the user to make different decisions based on what they deem top priority.
  - Variable Difficulty AI
    - We'll build a simple AI that completes the bare minimum necessary to compete in the game. If time allows, the AI will be made to follow basic strategies and will possibly be made more aggressive depending on what level the user chooses. The game allows several instances of the same or different AIs to compete against one another (and the player) simultaneously.