

# Chapter 1

## Map and Movement

**Brett Menzies, Gabriel Giovanini de Souza**

**diagram:**

**Description:** The map subsystem revolves around the “Map” class, which is composed of a “Layout” and a “Tileset”, and aggregates sets of “Item Position” and “Player Position” classes. A “Renderer” class requires an instance of a “Map”; Its other connections are outside the scope of this diagram. A “Tileset” aggregates “Tiles” (fixed size map tiles) and “Sprites” (Other images drawn on a map, like items and characters) for use by the map and rendering code. Each “Item position” object represents the position and sprite id of items that have been dropped on the map. “Character position” acts similarly, except it can be modified by “input”, which represents networked, npc, and local player inputs for the purposes of this diagram.