High Level Architecture of Game Assembly Application

The Game Assembly application has a two layer architecture with the first layer containing the components and the second layer containing the entities. The first layer in the two layer architecture contains three main components: the game layer loading component, the game building component, and the export component. The game layer loading component retrieves the specified entities from the repository (currently xml files) and converts them into Java objects. Additionally, it wires the game layers together resolving any dependencies required for assembly. A game layers object is created in this process and can be passed to the game building component. The game building component consists of three sub-components that perform the actual construction of the game. The first of which is the structure which calls upon the other two sub-components, the theme component and the locale component, to build the individual acts which will comprise the game. The theme sub-component builds the story line which consists of the intro and outro acts of the game. The locale builds all interior acts which are made up of the lessons and challenges as well as intro and outro story sequences. After receiving all acts from the other sub-components, the structure wires the acts together into a game. Once the game is built it can be passed to the final component, the export component, which exports the game into the desired format (currently an xml file). The second layer in the two layer architecture simply contains the entities which encompass all data needed to build the game.