

Requirements and Design Documentation

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1 Functional Requirements

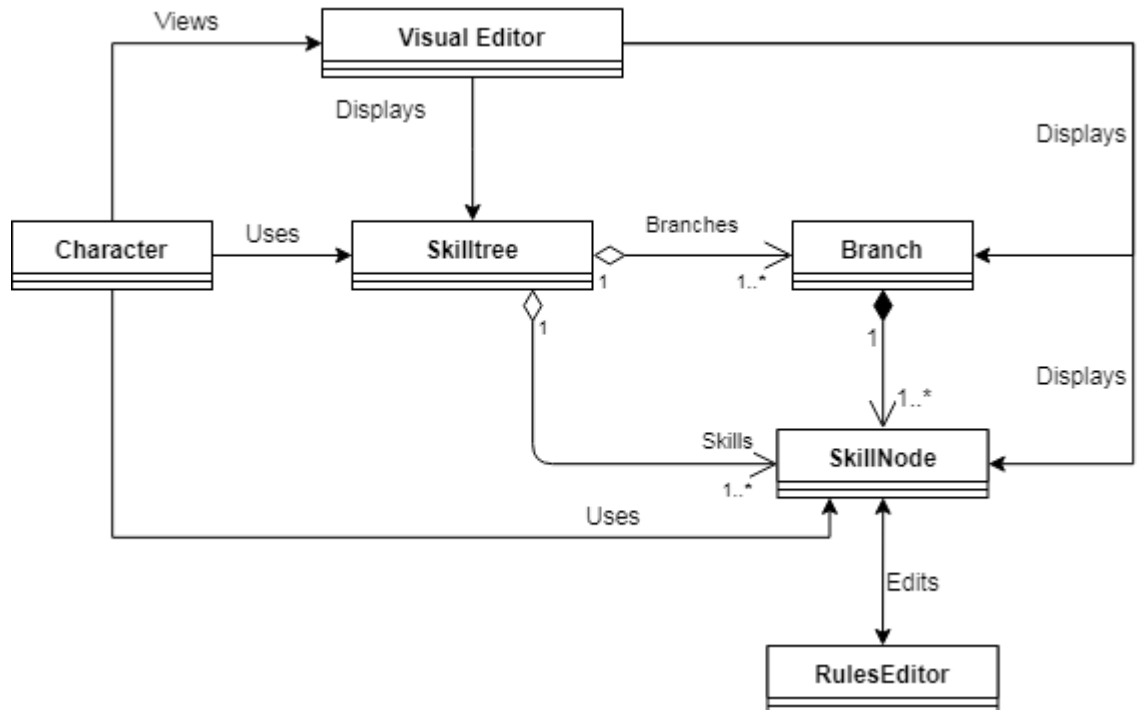
The Editor must be able to do the following:

- Add a new node to the tree.
- Move an existing node around in the tree view.
- Delete an existing node from the tree.
- Copy a node and all its properties.
- Paste a copied node to the tree view.
- Edit the following settings of a node:
 - Name
 - ID
 - Description
 - Visible
 - Enabled
 - Max
 - Cost
- Links between nodes must be automatically created, but links can also be manually set and changed in the editor.
- Save and Load the state of the tree at any point in time. Save data must be stored in a JSON format.
- Undo and Redo any actions or changes performed on the tree at any point in time. Must be able to undo as many times as actions where performed, undo until original tree state is reached.
- Multi selection of nodes. Must be able to select multiple nodes at once and perform all node operations (Move, Copy, Paste, Delete, Edit, etc.) to all selected nodes at once.
- Automatically produce a layout of the current nodes.
- Zoom in and out of the tree view.
- The user must also be able to create custom global variables that will be used in the tree structure.
- The custom variables must be usable in the node settings.

Testing must be performed on the skill tree.

- Users should specify global variable values and amount of skill points available
- User should be able to buy skills with skill points
- User should be able to reset skill points
- Must create a JavaScript file that web developers can use to import, display and use a skill tree on their own webpage.
 - Allow the developer to give a skill tree json file that can set global parameters and set initial selected skills.
 - Allow the developer to query what skills have been selected.
 - Allow the developer to trigger their own functions when skills are selected.
 - All these functionality should be demonstrated with jsFiddle.
- Allow users to edit how the nodes, links and background looks.

2 Domain Model



3 Architectural Design and Structure

The Trii system is based on the Client-Server architecture style. This is because the website is the server that provides the service of the skill tree software to several clients that connect to the server. The clients can connect from anywhere to the server via a http protocol and use the software from their own work station.