

University of California, Merced

Visual Novel Game Engine

Presented by Cristian Parker & Ethan Hom

Use Case : Game Designer/Backend User

Manage Characters: Create, Read, Update, and Delete entries in characters table (ex. add character, change name)

Manage Art: Upload images to sprites and locations, also Link sprites to character

Manage Scenes: Create new scene giving them names (ex. Ch. 1), also Assign to a location (ex. The Library)

Dialogue: Add lines to scene. Defines content, speaker/char_id, and sequence_id (text, speaker, order of speaking)

Game Logic: Define events (ex. play music) and Scene_Events table to Trigger events to start

Narrative: line for player choice with scene_links table to different destination scenes

Use Case : Player/Frontend User

Start New Game: Player initializes game, Scene_ID is set to default/starting scene, Locations table is called for background_path, and queries Scene_Sprites for character sprites

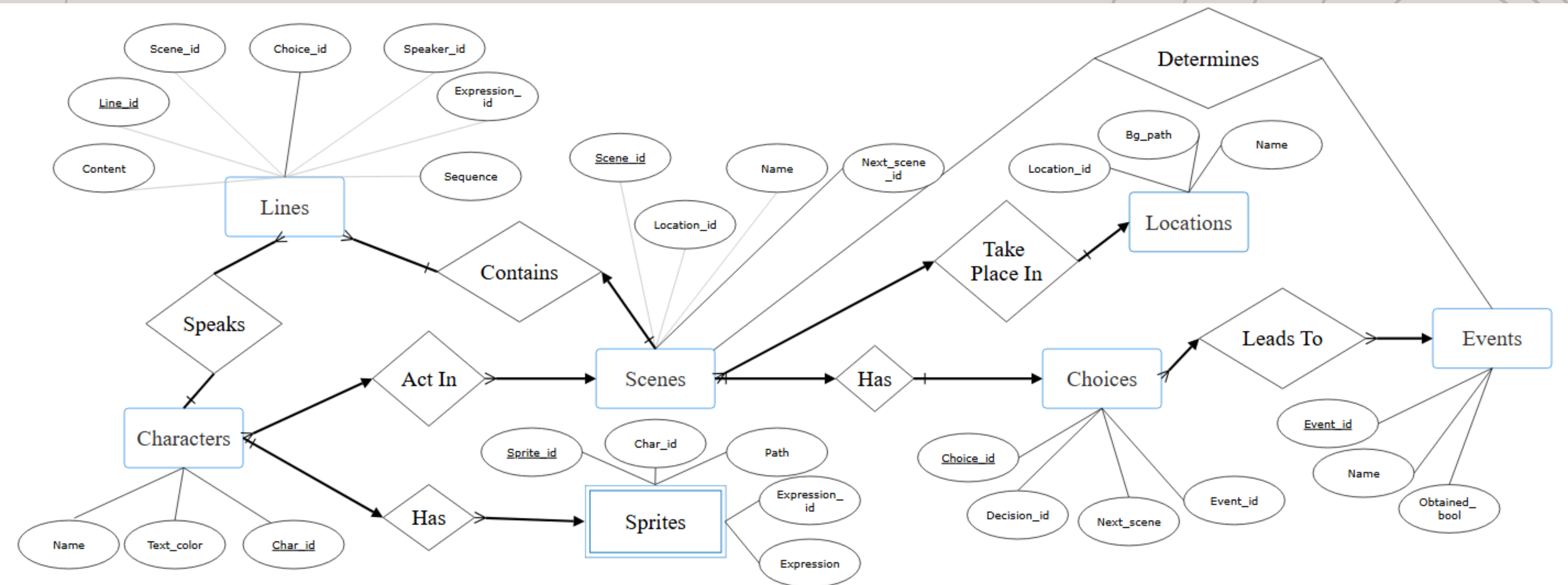
Dialogue: Click on buttons and queries Lines table for next sequence_id in current scene_id, then shows content and speaker

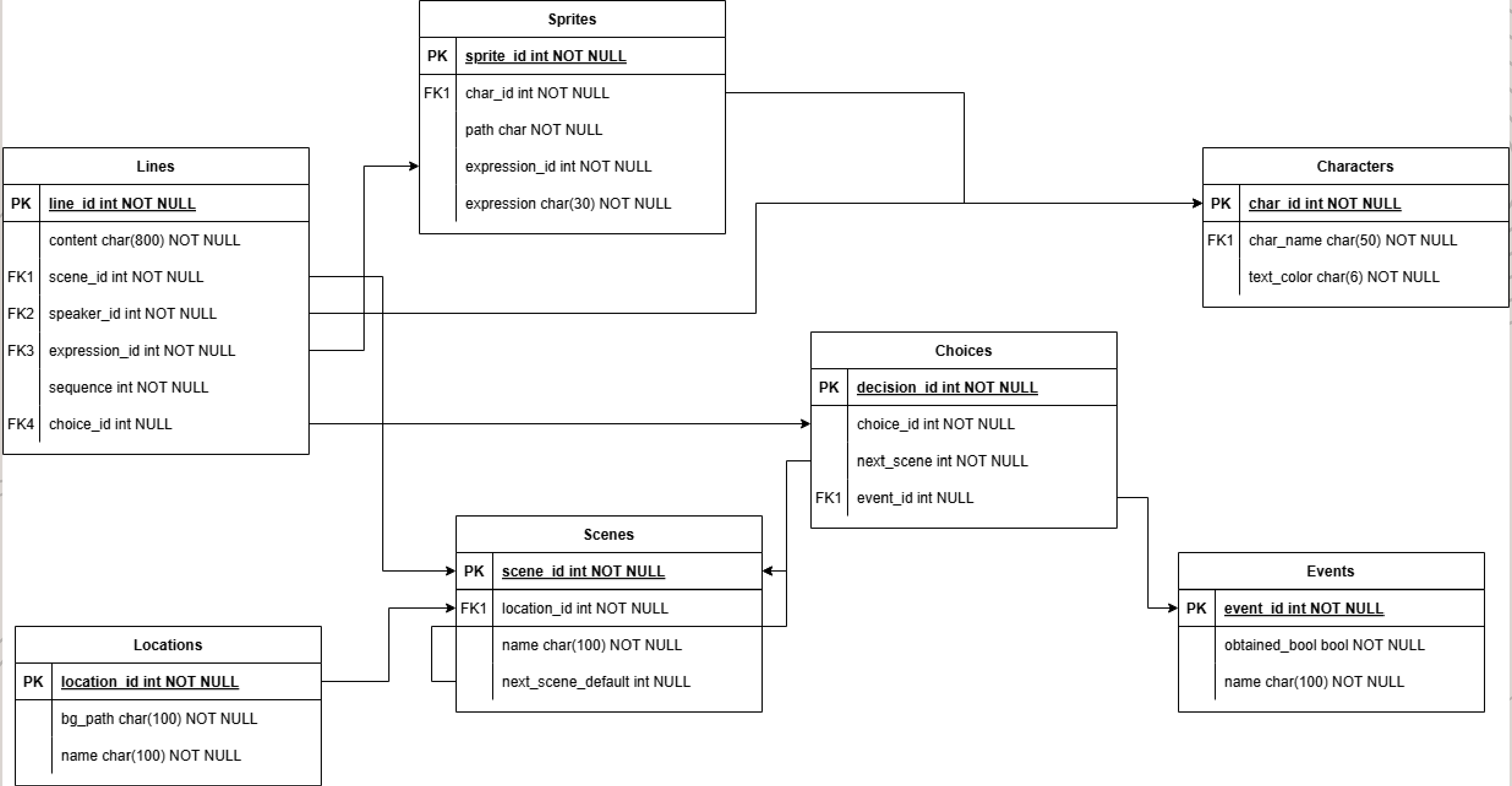
View Scene Elements: As player and game progresses, game constantly checks for Events in the current scene or line (ex. Scene_Events) This can trigger effect, sprite change, or music changes (ex. sprite of character changes to angry sprite)

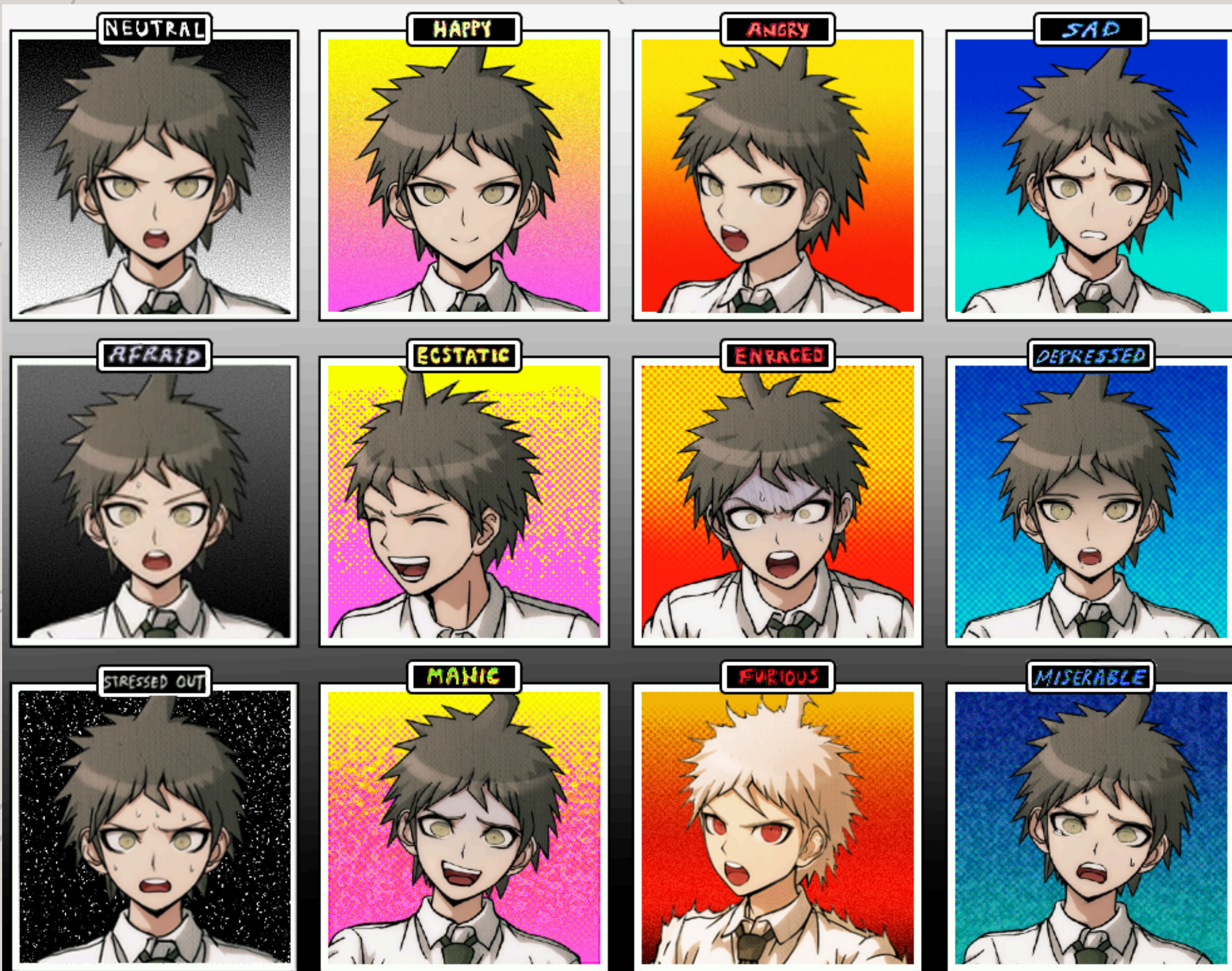
Choice: Loads line and choice_text. Player is shown multiple choice_text options. When player selects one, game queries the Scene_Links table to find correct to_scene_id associated with choice and loads new scene

Load Game: Player selects save file. System stores scene_id and any variables so player can load to exact point.

Quit Game: Player exits

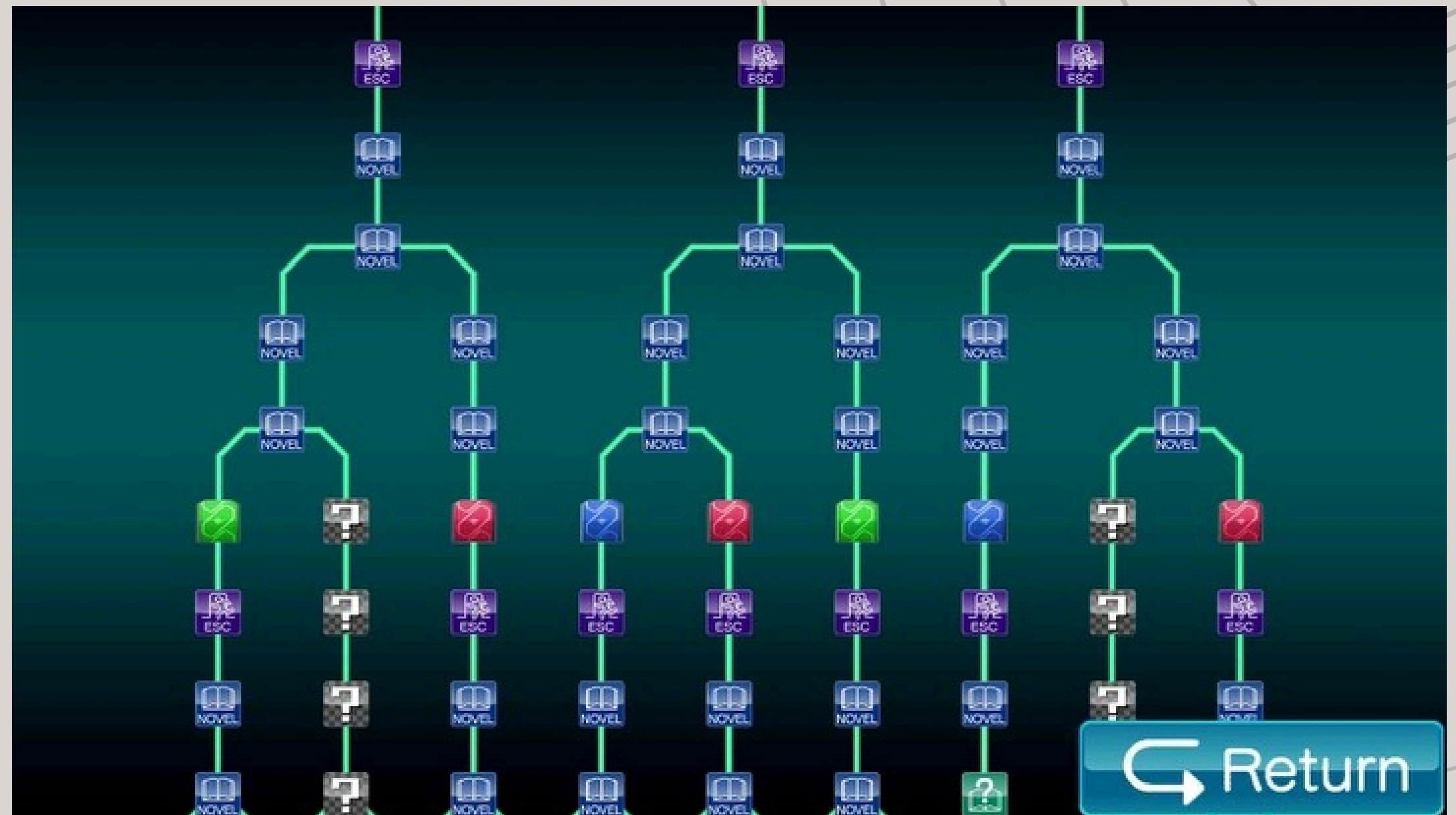
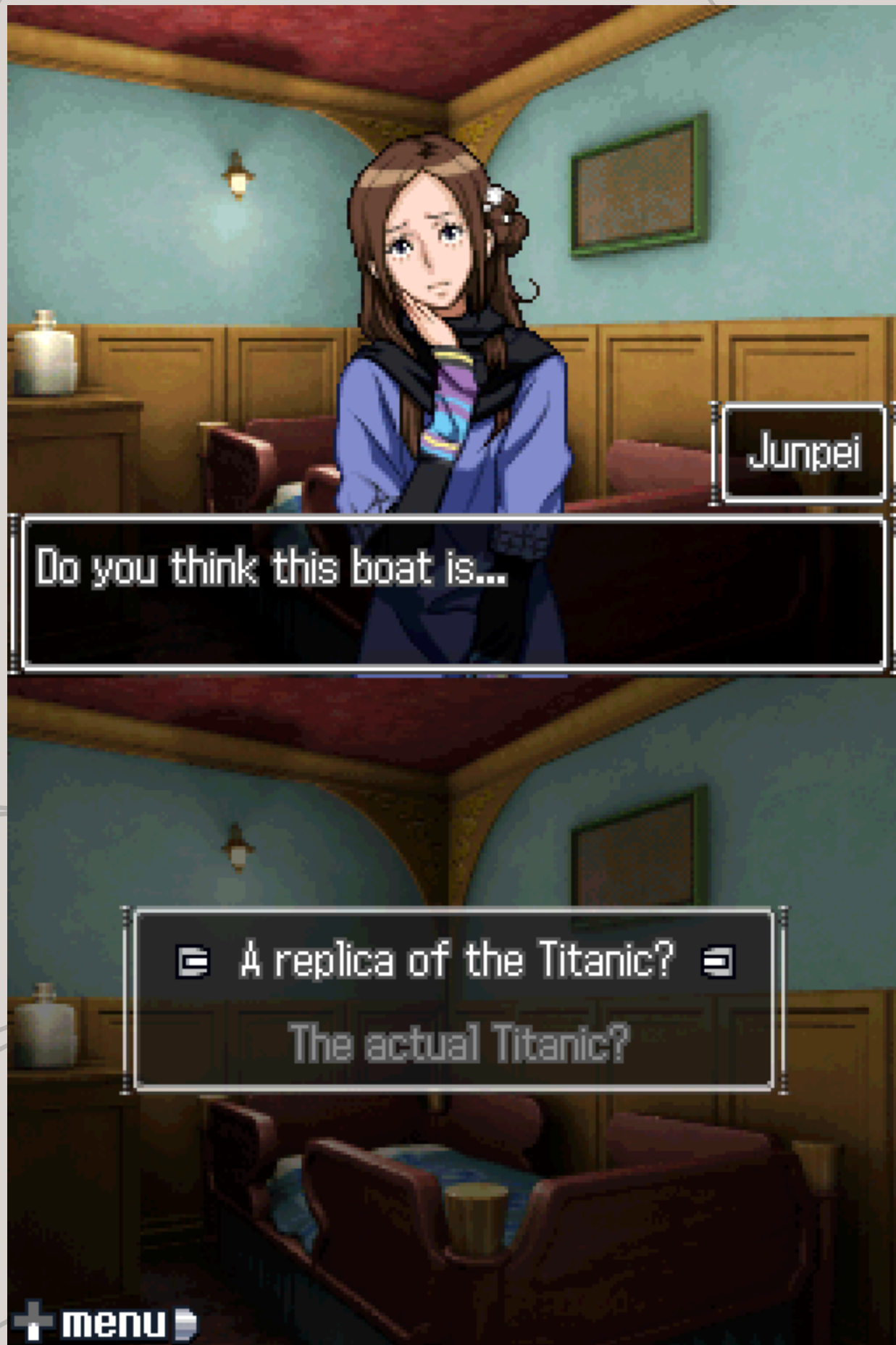






Sprites

Choices



<https://github.com/EthanHom/Visual-Novel-Game>

Thank You

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