

# Neo-Orsimer

(A custom mod developed using Skyrim Creation Kit)



(Cover Image)

## Contents

Developers and Contribution.....	3
Introduction .....	3
Development.....	3
Phase 1: Preproduction Blueprint.....	3
Phase 2: Quest Design and Scripting .....	4
Flow of the player progression via Questing .....	5
Explanation of an encounter with a custom AI Package .....	5
Phase 3: Sounds and Playtesting .....	6
Things I learned – avoiding Soft Locks .....	6
General Design Principles I came across and tried to implement in the project .....	7
Conclusion.....	7
Screenshots.....	8
References .....	9
Contact Me.....	9

## Developers and Contribution

- Shreevallabh Kulkarni - (That's me)
  - Quest Design, Quest Scripting, NPC AI Scripts, Boss Script
- Darren Farr
  - World Building, Navmeshes

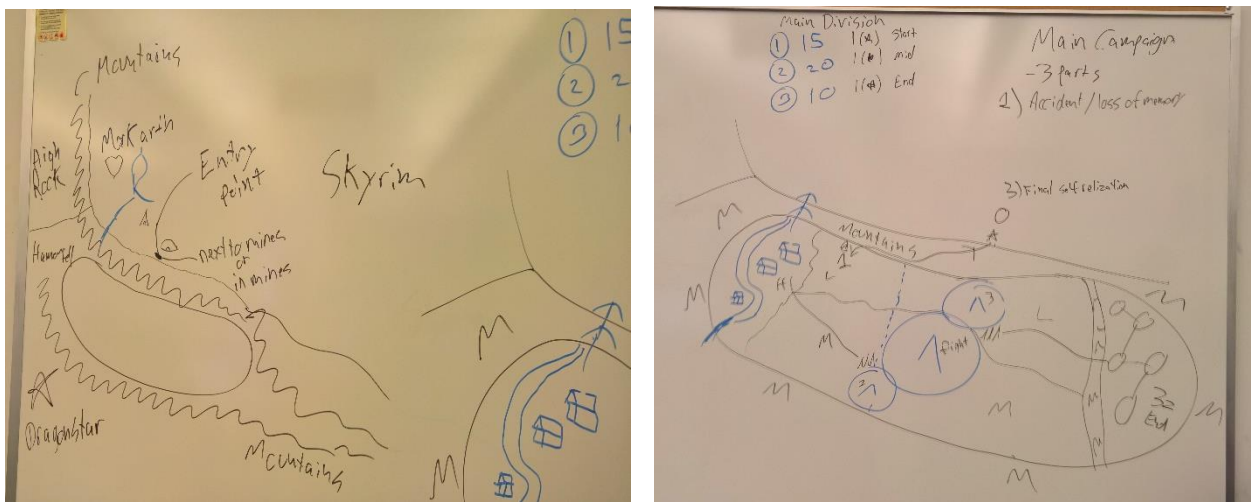
## Introduction

The reason I wanted to develop this mod was to learn more about “Quest system” and “Reward system” of RPG genre. I am always intrigued by these systems whenever I play games. Designing the “content” of the game around the player’s “fulfillment” is a very important part of RPG games. I have seen this phenomenon implemented in games like Skyrim and World of Warcraft, thus I decided to make a small mod to put this concept into practice. This document talks about the development process of this mod in brief, in addition to explaining a special gameplay event implemented in the mod.

## Development

### Phase 1: Preproduction Blueprint

First thing I did even before I touched the editor, was to collect references from different games and real-world photos. Next, I drew the outline of the world and some specific geometrical features of the map. Following are top-down drawings of the map:



Figure(s): Rough whiteboard sketches of the map while in development

Following is the (in-editor) screenshot of the map in development. The grids on the map are “cells” - which allowed us to get an estimation of the size of the world.

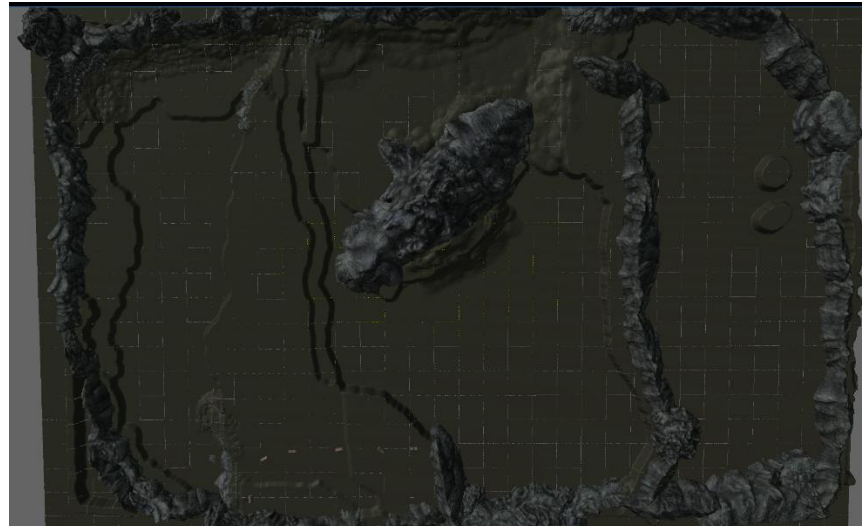


Image: Early in-editor screenshot of the map while in development

## Phase 2: Quest Design and Scripting

This was the actual development phase where I spent most of the time working in the editor. After plotting the story, I wrote the quest chains in software called as *Twine* (Klimas, 2009), it’s an interactive story builder tool. Following is the screenshot taken in Twine. In addition to showing how quests are linked together, it also shows the relation between quests such as which quest acts as a parent(starting) quest to another.

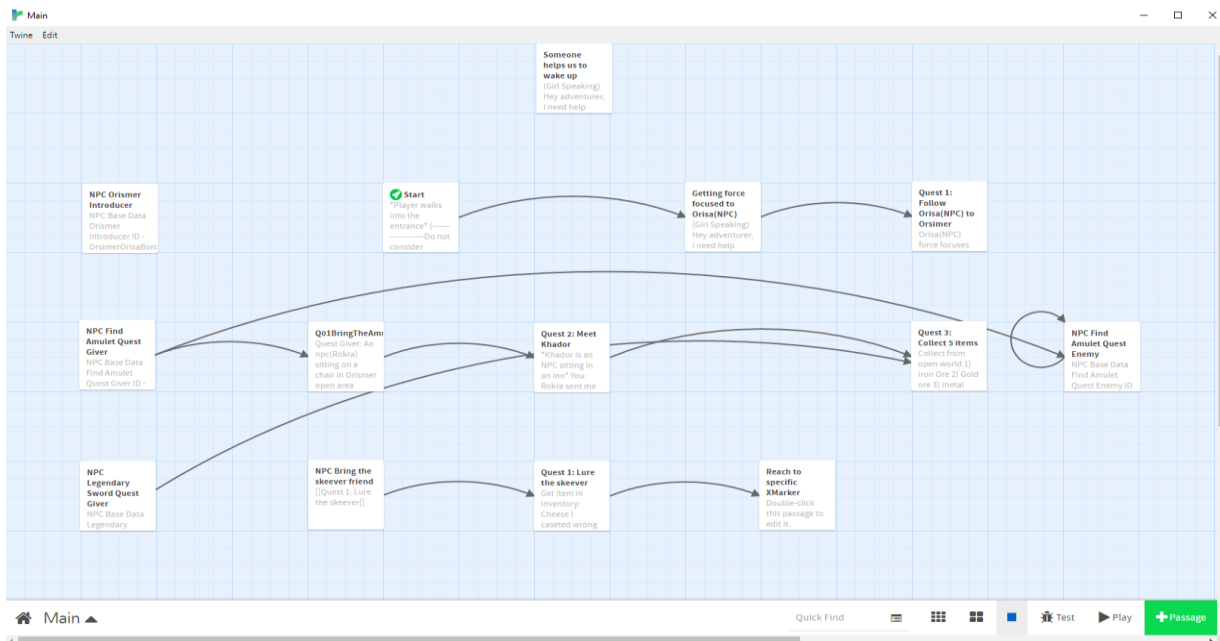
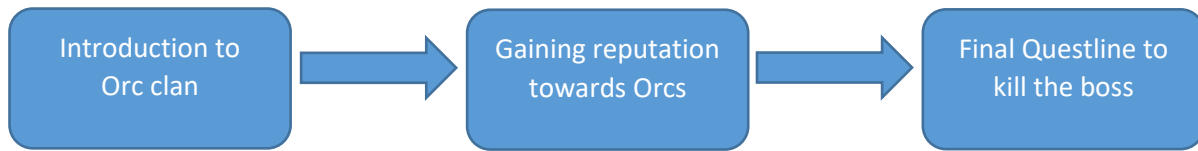


Image: Screenshot from “Twine” – showcasing the mod quest database in a visual format

## Flow of the player progression via Questing

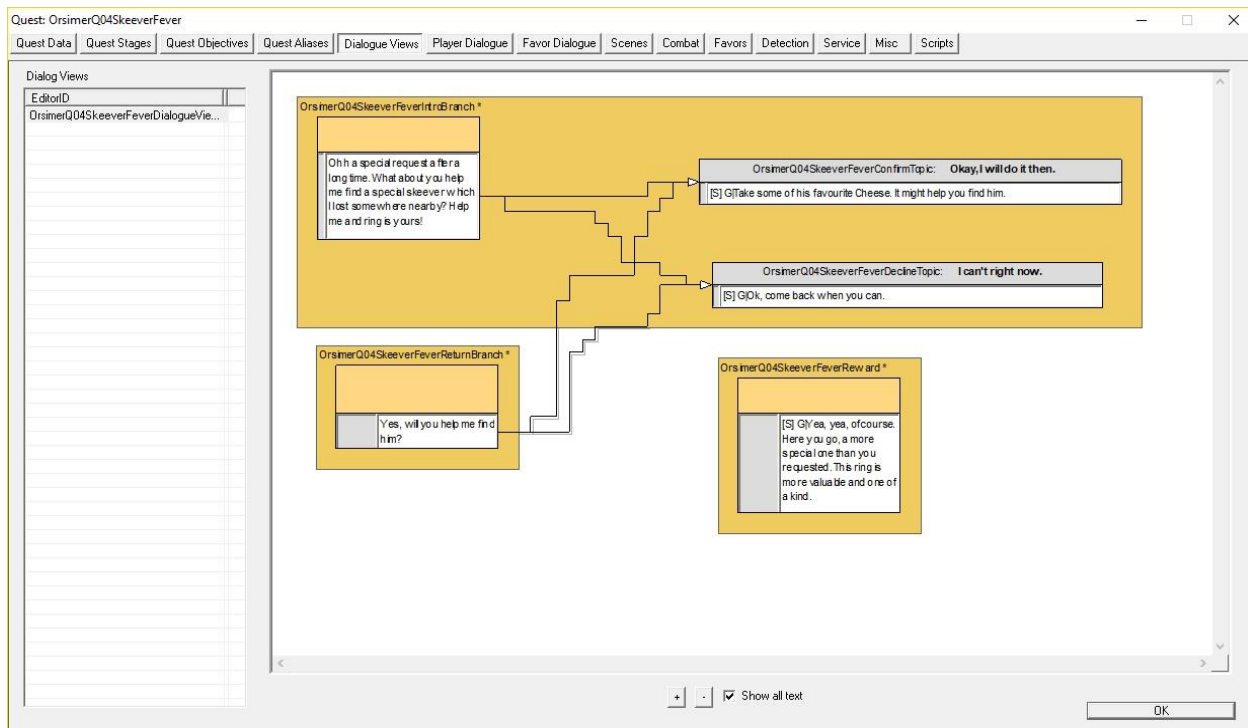
The flow of questing is primarily divided into 3 parts shown as follows.



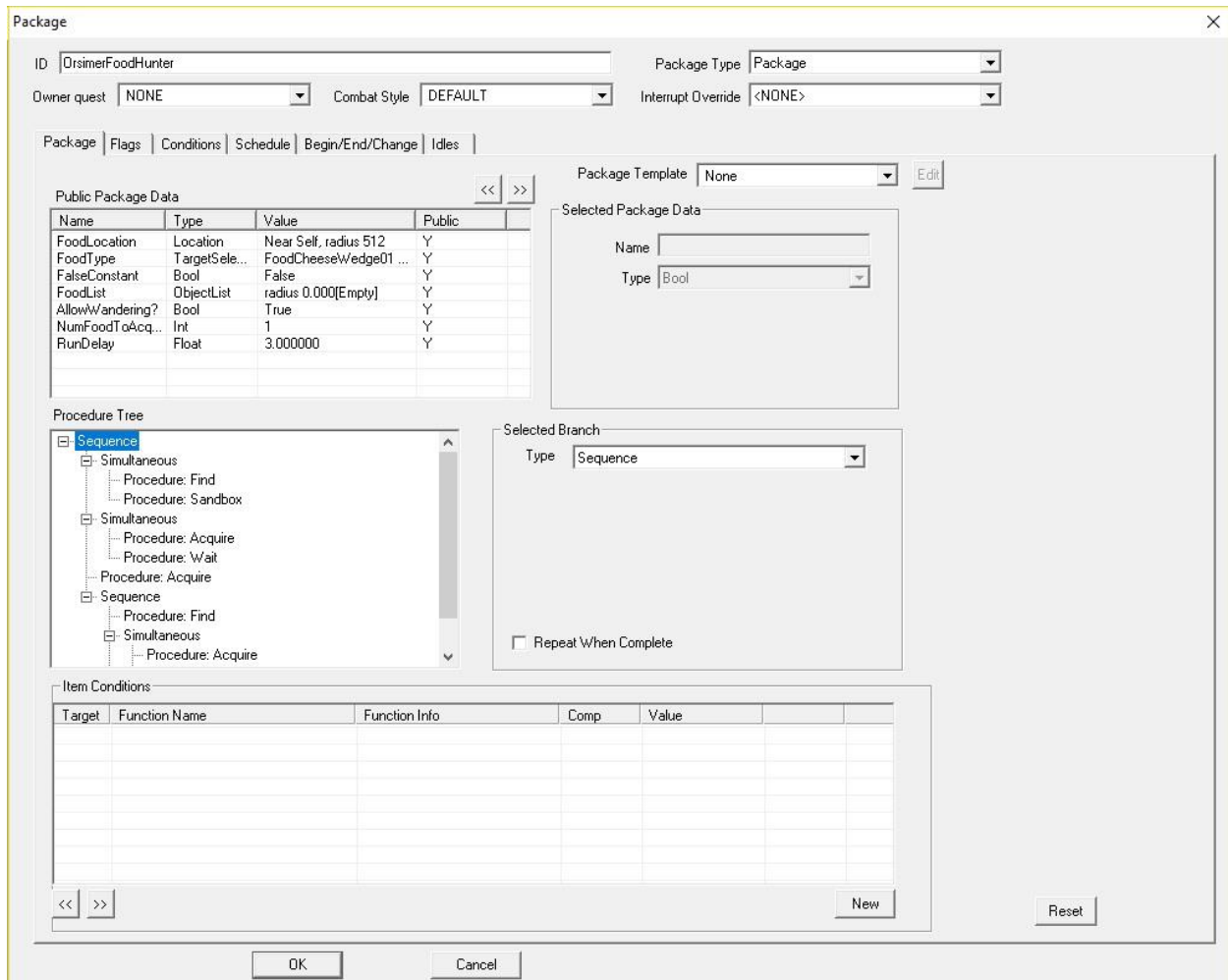
*Image: Linear flow of questing/player progression*

## Explanation of an encounter with a custom AI Package

When existing packages defined in the kit are not enough to create the required encounter, then creating a custom AI packages comes handy. There is a quest given by an NPC who is looking for his lost pet Skeeever. The player is asked to find and bring the pet to him. The pet is hiding in nearby bushes, but it is hard to spot. The player is provided with a quest item, a couple pieces of food. The player must lure the pet out of the bushes by dropping the food item in the vicinity of the pet. The pet's AI will be looking for dropped food items and will walk towards the food. This way, the player has to take the pet to its owner. Following are a couple of images related to this quest.



*Image: Screenshot of a dialogue view from the quest related to the lost pet*



*Image: Custom AI Procedure Tree which defines the behavior of the lost pet*

### Phase 3: Sounds and Playtesting

This was one of the most interesting parts of development. I had given each NPC a personality, which was defined by the tone of their language they speak while communicating with the player. To make it more effective, I decided to give custom speech voices to NPCs. The problem was all the NPC's were orcs and my voice tone is soft (at least not "orc-ish"), so I decided to use voice changer and then record all the voice lines. It was fun to listen to my own voice in a game like Skyrim. I playtested the mod with my friends and they found it fun with a couple bugs reported. Some of the bugs were related to "soft lock" which is discussed in the following part.

### Things I learned – avoiding Soft Locks

Questing is a very important part of games, especially for the RPG genre. Proper quest design is necessary to keep the player immersed in the story. However, being an RPG there are could be a lot of loopholes which quest designer needs to take care of. For example, what happens if an NPC dies who is a major part of a quest line? Or what happens if a quest item is lost/destroyed by the player and a future

quest is dependent on it? Or what if the player tried to complete the quest objective first before accepting the quest?

A simple loophole can break the whole quest chain and possibly stop the player from progressing in the game. These problems are called “Soft Locks” (a term very famous in the speed-running community).

Following are a couple of techniques which I used to solve some of the basic Soft Locks:

- 1) Make important NPC Immortal or respawn them. (This was done using “flags” in Creation Kit)
- 2) Use of Conditional Logic to traverse between different stages. So, if an NPC dies or the player destroys the quest item, then just traverse to appropriate quest stage.
- 3) Use of dialogues system. Allow the player to talk to quest givers again in case the player loses an important item and if possible, tell the player through dialogues about what could be done next. For e.g., If a player has given an objective to carry one item from one place to other and player loses the item, then let the player get the item once more from the quest giver. But there can be a problem of game balancing if the player keeps losing items, in that case, tell player first to not lose the item and if he loses it then change future dialogues dynamically. For e.g. NPC’s will remember that item is lost and will say “You should not have lost the item” etc.

## General Design Principles I came across and tried to implement in the project

- Sandwich Rule (“Bethesda Tutorial Encounters,” 2018) – Do not immediately engage the player in combat after a loading screen, the player might have gone to get a sandwich.
- The game should provide feedback to the player’s actions to show that the designers do care about players choices.
- Mix up the types of enemies in an encounter. Do not put similar types of enemies in one group encounter. For e.g. have some melee, ranged casters in one group. This will give proper fighting experience to all types of players.
- Players will always try to take the path of least resistance to get to the loot.
- And many more...

## Conclusion

I learned a lot about how players react to different types of rewards. More than 70% players in the sample size of 50 testers, tried to sell the quest item (if it is valuable) while being aware of the fact that this will result in abandoning the quest (one of the side quests). I was also able to get a broader perspective of how quests are designed to keep the players engaged in the storyline.

On another note, I was managing the project using a source control tool, due to this, the problem of software crashing was practically nullified. Polishing the stuff was not the top priority as I did not plan to release the mod in public. Additionally, keeping the scope of the project small also helped to keep the project on track.

## Screenshots



*River and Jungle*



*Cave connecting mod area and Skyrim*



*Bridge between Jungle and Orc camp*



*Spring waters Pool*



*Area near final boss*



*One of the waterfall's in the area*



*Abandoned Mining Cave*



## References

- Klimas, C. (2009). *Twine*. Retrieved from <http://twinery.org/>
- Bethesda Tutorial Encounters. (2018). Retrieved from [https://www.creationkit.com/index.php?title=Bethesda\\_Tutorial\\_Encounters](https://www.creationkit.com/index.php?title=Bethesda_Tutorial_Encounters)

## Contact Me

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