



OVERHAULING TERASOLOGY'S NEW USER INTERFACE FRAMEWORK

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Terasology is a modular and extensible open source voxel-based game as well as a game development environment for software developers, designers, game testers, graphic artists, and musicians. Terasology's New User Interface (TeraNUI) is a canvas-based UI framework mostly implemented by contributors of The Terasology Foundation in 2016. The ravages of time as well as modern advances and demands of user interface design necessitate an overhaul of the framework and the UIs on top.

PROJECT DESCRIPTION

The main project task is to overhaul the TeraNUI framework including requirement analysis and planning, design and development, as well as deployment and consumption in Terasology. The overhauled framework should provide the basis for creating modern interactive menus, in-game screens, and HUD elements.

REQUIREMENT ANALYSIS & PLANNING

In a first step you are required to familiarize yourself with Terasology and the existing TeraNUI concepts and implementation, analyzing the game's requirements as well as limitations and issues of the current framework. In addition, you should study other UI frameworks of widely used game engines like Unity or Godot. Based on this analysis you will plan both, modifications for existing parts of TeraNUI and new concepts and UI elements that need to be added.

DESIGN & DEVELOPMENT

During the next project stage, you will design the concepts and UI elements to be added and develop both, the planned modifications, and new additions. The development should aim at a performance-aware implementation and include documentation as well as unit and integration tests for concepts, UI elements and the underlying code.

DEPLOYMENT

In the final step, you will integrate the overhauled UI framework with the game by applying the TeraNUI release process and consuming the release in Terasology. This might require migrating menus, in-game screens, and HUD elements to comply with the implemented modifications or use the newly added concepts and elements where applicable.

The Terasology Foundation

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