Development Project Summary: Make-or-Break
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Design Goals

The design of Make-or-Break aims for a balance between realism and entertainment. Keeping this in mind the main design objectives for Make or break are:

- **Physics Simulations:** Realistic depictions of natural forces on structures
- **Scalability:** Wide range of building sizes / varying magnitudes of disasters
- **Performance Optimization:** Smooth and responsive simulations on varying hardware
- **Education Value:** Introduces engineering principles, and disaster preparedness / awareness

## Proposed System Architecture

For the "Make-or-Break" application, a suitable software architecture would be the Model-View-Controller (MVC) architecture.

1. **Model:** The model represents the core data and logic of the application. For "Make-or-Break," the model would encompass the physics engine, which simulates real-world forces acting on the structures, as well as the database or data structures holding information about buildings, challenges, and user progress.
2. **View:** The view layer handles the presentation of the data to the user. In this context, the view would be the 3D environment where users can see their structures, interact with the simulation, and receive feedback on how their designs fare against natural disasters. It would also include the user interface elements for creating, editing, and navigating through the application.
3. **Controller:** The controllers would manage user interactions such as creating and editing structures, initiating simulations, and responding to events like challenges or disasters. They would also orchestrate communication between the model and view components.

Open Issues

Issues that Make or Break could face upon launch were determined to be:

- **Hardware Compatibility:** Consistent performance across varying hardware configurations
- **Resource Constraints:** Limited budgets, time or personnel
- **Technological Dependencies:** Reliance on third party technologies for physics simulations, rendering, multiplayer support, etc.
- **User Feedback:** Affects future updates, features, marketing strategies, etc.
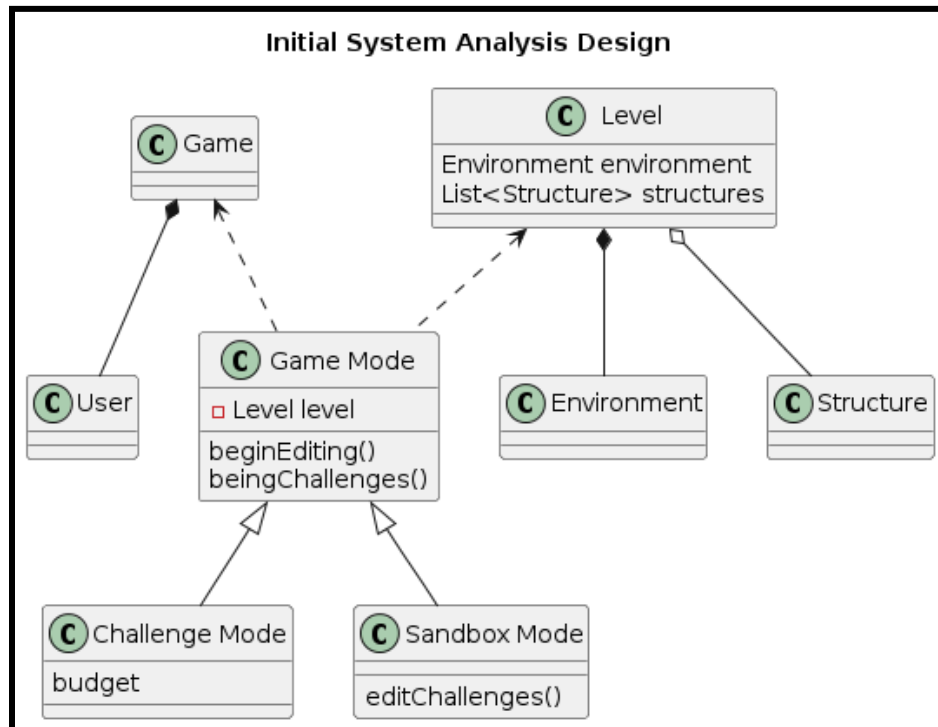
Initial System Design

Gameplay Mockup