Predicted Identities

Predicted identities are the core entities managed by the CSP system. They are normal Unity components that can be used to define the behavior of objects in a predicted environment. These identities are responsible for simulating their state based on user input or environmental factors, ensuring that the client can predict and reconcile their behavior accurately.

Key Concepts

1. `PredictedIdentity` **Abstract Class**:
   - The base class for all predicted entities.
   - Not meant to be used directly; instead, it provides the foundation for more specialized implementations.
   - Handles the lifecycle of prediction, simulation, and reconciliation.
2. **Generic Variants**:
   - `PredictedIdentity<INPUT, STATE>`:
     - Used for entities that are controlled by user input.
     - `INPUT` represents the user input (e.g., movement keys, actions).
     - `STATE` represents the entity's state (e.g., position, rotation, velocity).
   - `PredictedIdentity<STATE>`:
     - Used for entities that are not directly controlled by user input but are affected by the environment or time (e.g., physics objects, AI-controlled entities).
     - `STATE` represents the entity's state.