

SPRS-20 Feature Document

User should be able to make an API call through RPC so that they can control the simulation environment

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 **SPRS-20** - User should be able to make an API call through RPC so that they can control the simulation environment DONE

Description

As a User I should be able to make an API call through RPC so that I can control the simulation environment

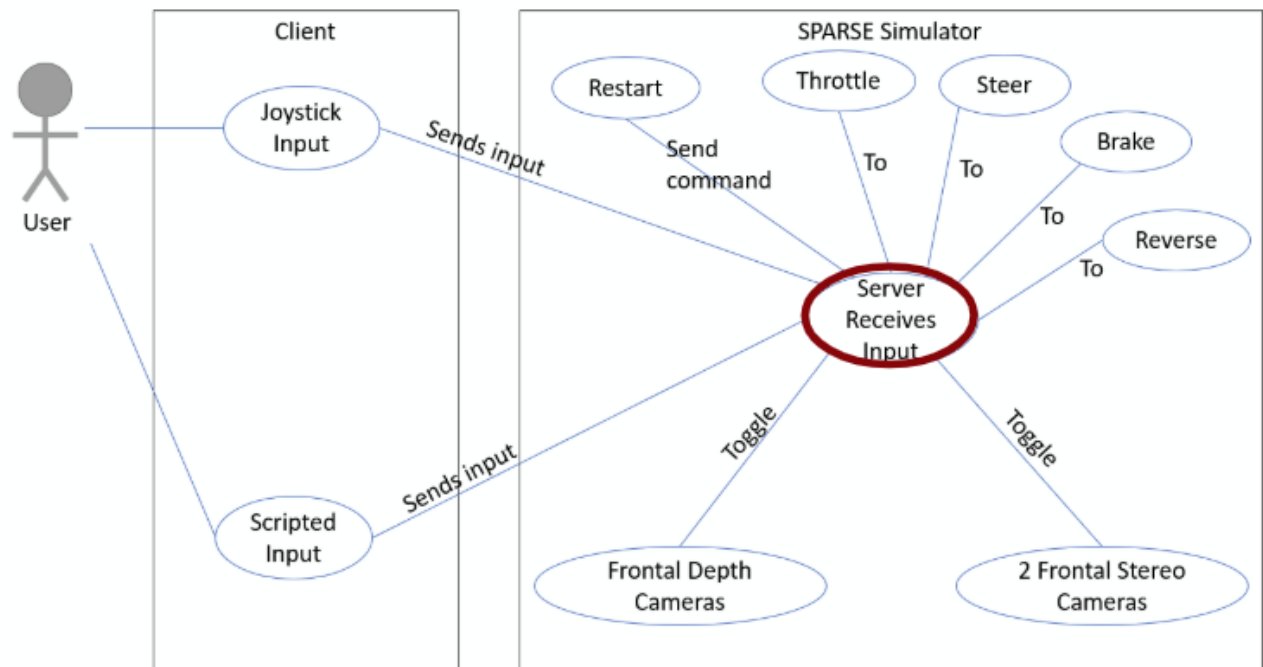
Acceptance Criteria

- On Game Startup create thread, start RPC server in thread
- Bind some test function to RPC server
- Be able to call test function from RPC client
- When game is closed the server ends

Use Case

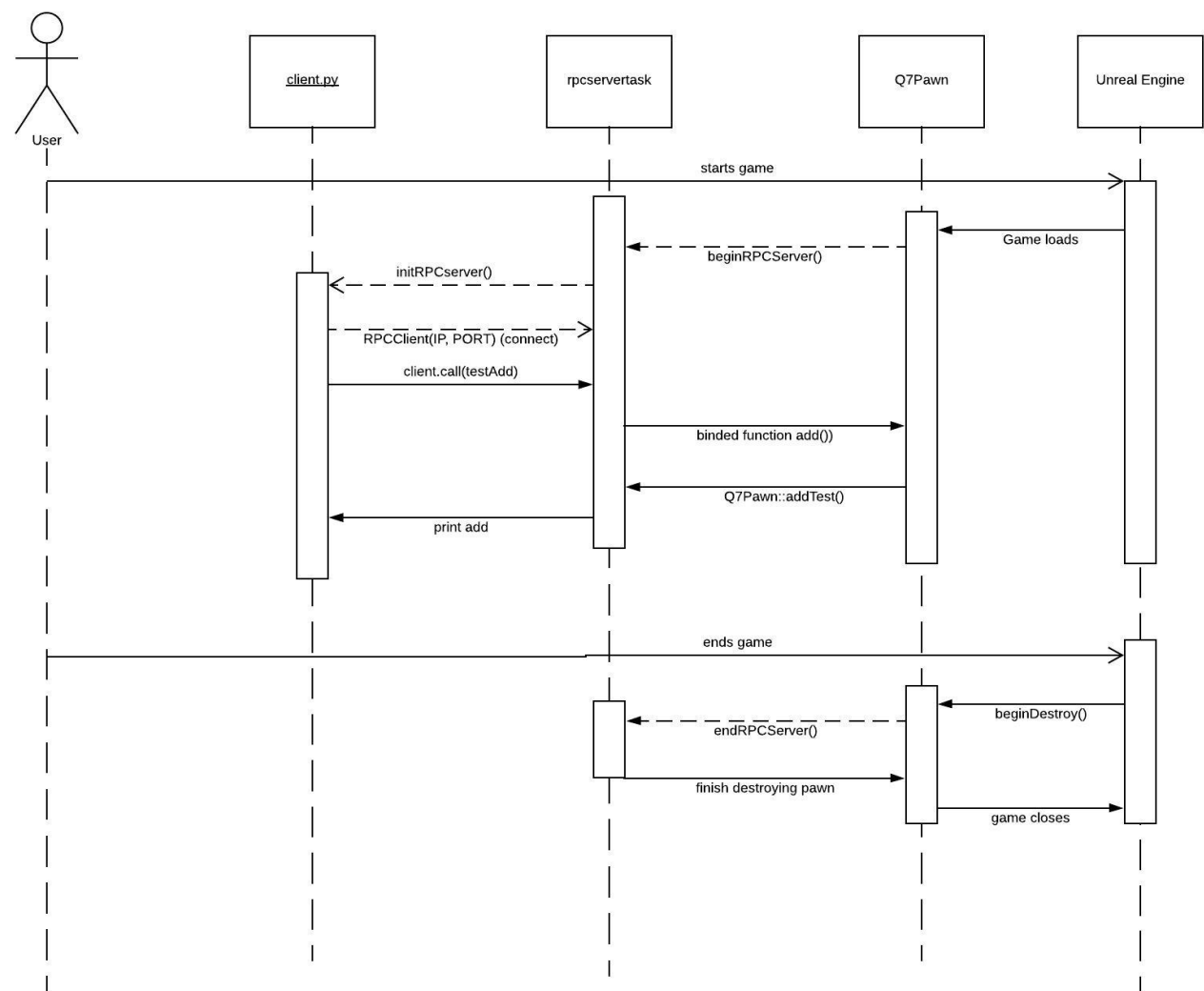
- Name: Platform setup, Start RPCserver
- Actor: AI developer
- Preconditions: Unreal compiles and runs
- Description <Flow of events>: User is able to send API calls to an RPC server that runs separately from the game thread

Use Case Diagram

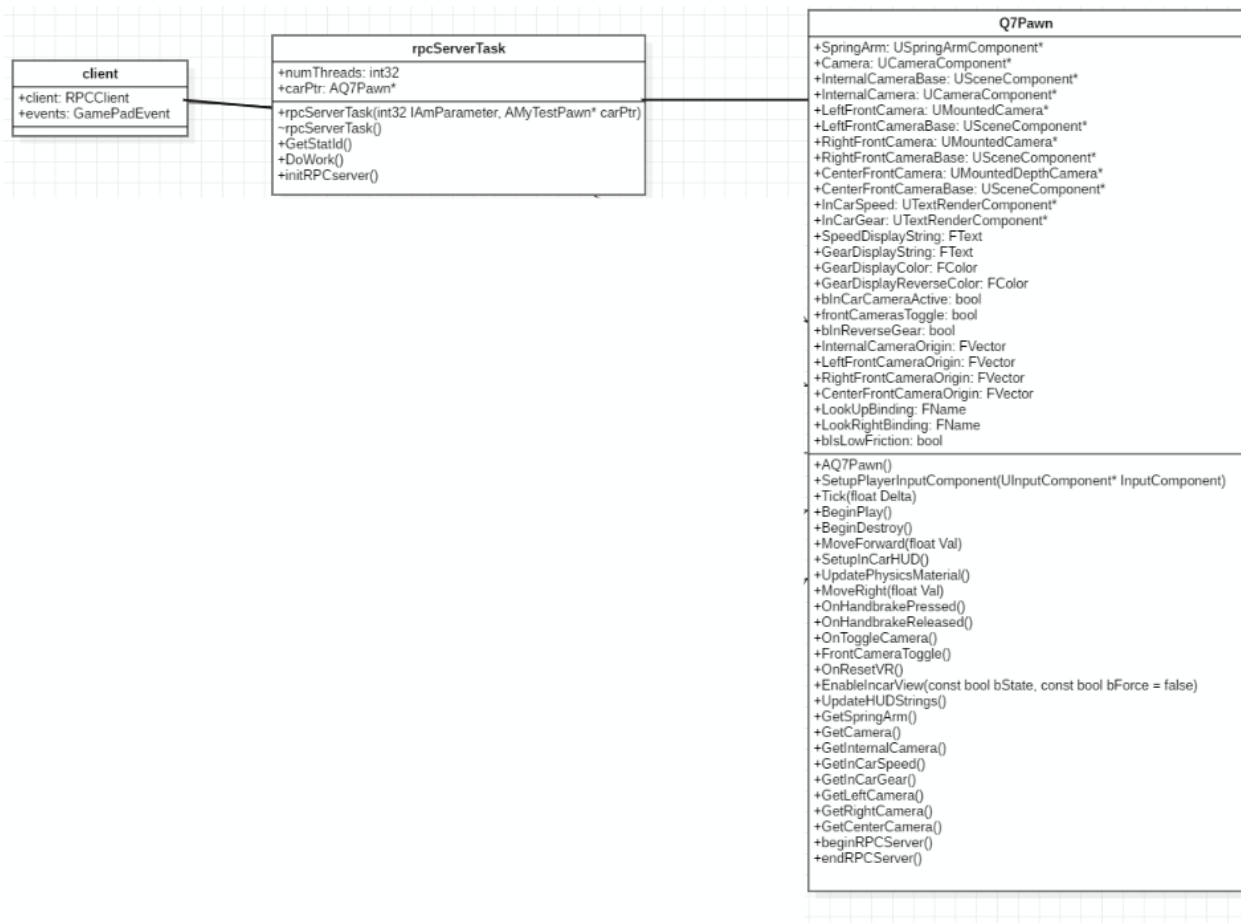


Sequence Diagram

SPRS-20



Class Diagram



Unit Test

- Test case ID: SPRS-20-A
- Description/Summary of Test: Start Game, make sure RPCserver starts in own thread
- Pre-condition: Unreal sim runs
- Expected Results: Game starts, RPC server begins on its own thread
- Actual Result: Game starts, RPC server begins on its own thread
- Status (Fail/Pass): PASS
- Test case ID: SPRS-20-B
- Description/Summary of Test: call test function add from client
- Pre-condition: Unreal sim runs, RPC start
- Expected Results: RPCserver will do the addition and then the client will print it
- Actual Result: RPCserver will do the addition and then the client will print it
- Status (Fail/Pass): PASS
- Test case ID: SPRS-20-C
- Description/Summary of Test: End Game, make sure RPCserver ends and so thread does its game
- Pre-condition: Unreal sim runs, RPC start, RPO call works,
- Expected Results: RPC server ends, thread ends, then game closes successfully
- Actual Result: RPC server ends, thread ends, then game closes successfully
- Status (Fail/Pass): PASS

Visual User Guide

<like one or two screenshots of the feature. For the hardware project, a photo of device is required>

