

Albert Chang  
Andrew Chen  
Joanna Clark  
Steven Tran  
Valeria Vikhliantseva

## Frog Masters Single Player Architecture Document

### CameraController

- The camera locks onto the screen on each **Update**.
- Only moves up when player moves up.

### Car

- **Start** generates random speed for each car object on initialization.
- Moves car at set speed to opposite side of map from spawn on every **FixedUpdate**.
- Car objects are destroyed when out of map range (**OnTriggerEnter2D**).

### Car Spawners

- **SpawnCar** randomly creates a car object at one of the spawn points.
- **Update** controls the delay between car spawns..

### Frog

- **Update** moves frog up, down, left, right according to user input and forbids player from moving beyond the map's bounds. It also uses raycasting to check if the player is on water without being on a log, setting a "Lose" scene if so.
- **OnTriggerEnter2D** parses what terrain the frog is, and sets a "Lose" state if hitting a car and a "Win" state if at the end of the map.

### Start

- **Update** checks for user input: Space to start the game and R for menu screens.

### Wood

- **Start** initializes a random speed for each wood object
- Wood moves left or right continuously on each **FixedUpdate**.
- Wood objects are destroyed when out of map range. (**OnTriggerEnter2D**).

### Wood Spawners

- **SpawnWood** randomly spawns a wood object at one of the wood spawn points.
- **Update** controls the delay between car spawns.