Rafting Simulator

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# Description

1. The purpose of the app is for the player to get immersed into beautiful sceneries while also experiencing the adrenaline of rafting down a river filled with both treacherous portions as well as calm crystalline waters. It’s great for people who have never been rafting before and want to gain some experience before actually getting in the raft, but without any of the risks. That is not to say it won’t be useful for rafting lovers who can’t always go do it in person and still want to experience the feeling it brings.
2. The simulator aims to be as close to the actual thing as possible and have a high level of realism especially when it comes to water physics and the movement of the raft in relation with the flowing water, the force coming from the paddles as well as the various obstacles that exist in rivers (boulders, tree trunks etc.).
3. What is gonna make this app different from other similar ones out there is the way it’s gonna integrate “fast-events” in the context of paddling. There will be an easy mode where you just have to touch the paddle to the water in order to move forward, and a realistic mode that introduces “fast-events” that require the user to make certain quick motions with their paddles (controllers) in order to successfully pass through areas with agitated waters.

# Similar products & Relevant Links

Name: WhitewaterVR

Url: [Whitewater Steam](https://store.steampowered.com/app/2360340/Whitewater_VR_Extreme_Kayaking_Adventure/)

Relevant Features:

* Immersive VR adventure
* Physics-based kayaking experience
* Beautiful hand crafted locations to explore
* Realistic water simulation
* Race against the clock and conquer the elements in each unique environment

Name: Rapid River

Url: [RapidRiverWiki](https://en.wikipedia.org/wiki/Rapid_River_(video_game))

Relevant Features:

* White water rafting
* Racing against the clock and passing through checkpoints
* Unique players controls that aim to replicate oars
* Haptic response when the player hits obstacles

Name: Kayak VR : Mirage

Url: [Kayak VR : Mirage](https://store.steampowered.com/app/1683340/Kayak_VR_Mirage/)

Features:

* Realtime multiplayer for two players.
* Beautiful and varied locations to explore or race through, featuring multiple times of day and weather conditions.
* Fully physics-based kayaking for an authentic experience that really makes you feel like you're on the water.
* Realistic full-body movement for increased immersion.
* Free roam mode for a more serene experience through the levels.
* A variety of sea and wildlife that brings every environment to life.
* Time attack with a checkpoint course on all levels for racing fanatics who want a real workout.
* Play asynchronously against other players on the global leaderboards or your friends.
* Customize your kayak, paddle and headwear with a wide range of unlockable options.

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# Main Features

PRINCIPAL MAIN VERY IMPORTANT FEATURE

* Simulating the experience of rafting down a river in a very realistic manner

Other features:

* Realistic water physics
* Swimming mechanics
* Different types of rafts
* Having to hold onto the paddle at all times with at least one controller, otherwise it will fall out of your hands and you have to pick it up (eventually having to get out of the raft and get it if it falls in the water)
* Fast events during more treacherous sections of the river and falling off the boat if you miss a set number/percentage
* Haptic response when the raft hits a rock, the player falls in the water etc.
* Beautiful scenery

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# User Journey Diagram - Step by step flow through app

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# Technologies, Libraries, Assets (cu linkuri) (>=5)

* XR Interaction Toolkit: <https://docs.unity3d.com/Packages/com.unity.xr.interaction.toolkit@3.3/manual/index.html>
* Meta XR SDK / Oculus Integration: <https://developers.meta.com/horizon/documentation/unity/unity-development-overview/>
* European Forests - Realistic Trees Asset: <https://assetstore.unity.com/packages/3d/vegetation/trees/european-forests-realistic-trees-229716>
* Trees Collection Asset PBR Asset: <https://assetstore.unity.com/packages/3d/vegetation/trees/trees-collection-asset-pbr-241435>
* Rock and Boulders 2 Asset: <https://assetstore.unity.com/packages/3d/props/exterior/rock-and-boulders-2-6947#reviews>
* Flowing Water of Streams, Creeks & Rivers:

<https://assetstore.unity.com/packages/audio/sound-fx/foley/flowing-water-of-streams-creeks-rivers-free-257563>

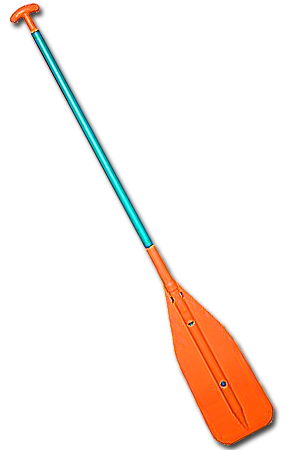
* Nature - Essentials

<https://assetstore.unity.com/packages/audio/ambient/nature/nature-essentials-208227>

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# MoodBoard

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