

Potato

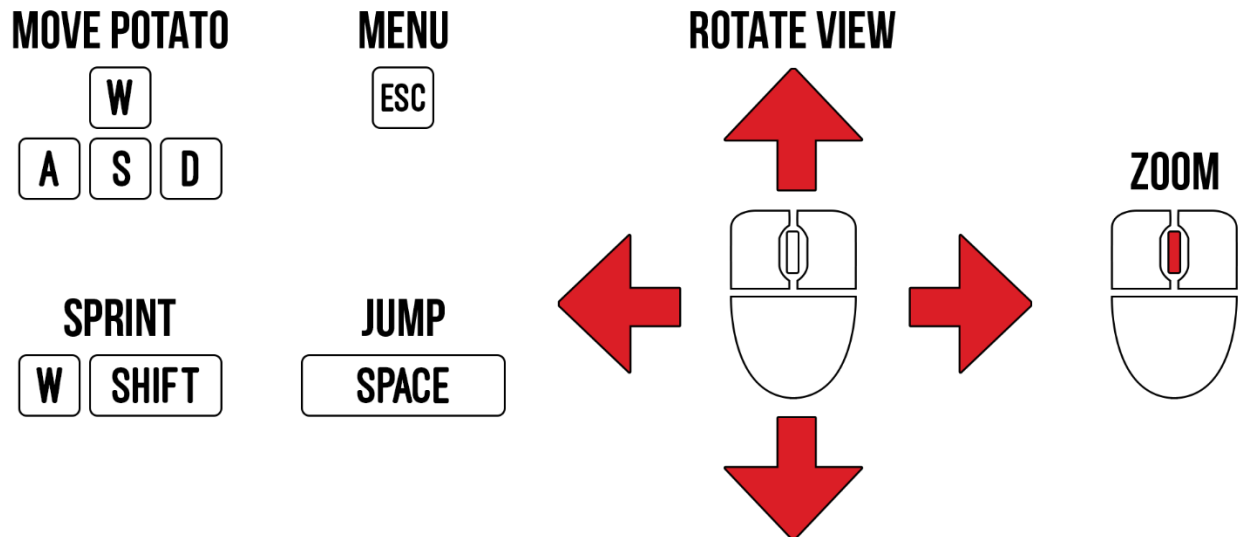
Tommy Deng

Potato is not a typical game one might come along. There are no definite rules, there are not clear objectives, and there is no promise of an end. Potato is a game where the player, a high-speed tumbling potato, mindlessly rolls around exploring the world.



Modified start screen (without the menu options)

The game is played by moving the potato around the large world through an adjustable third-person view. The controls are very simple and are as follows in the diagram below:



Features

Large world: I formed the terrain, textured it (grass, dead grass, sand, road, rock, dirt), and populated it (trees, bushes, grass, water, buildings, rocks, and miscellaneous objects) using built-in Unity terrain tools.

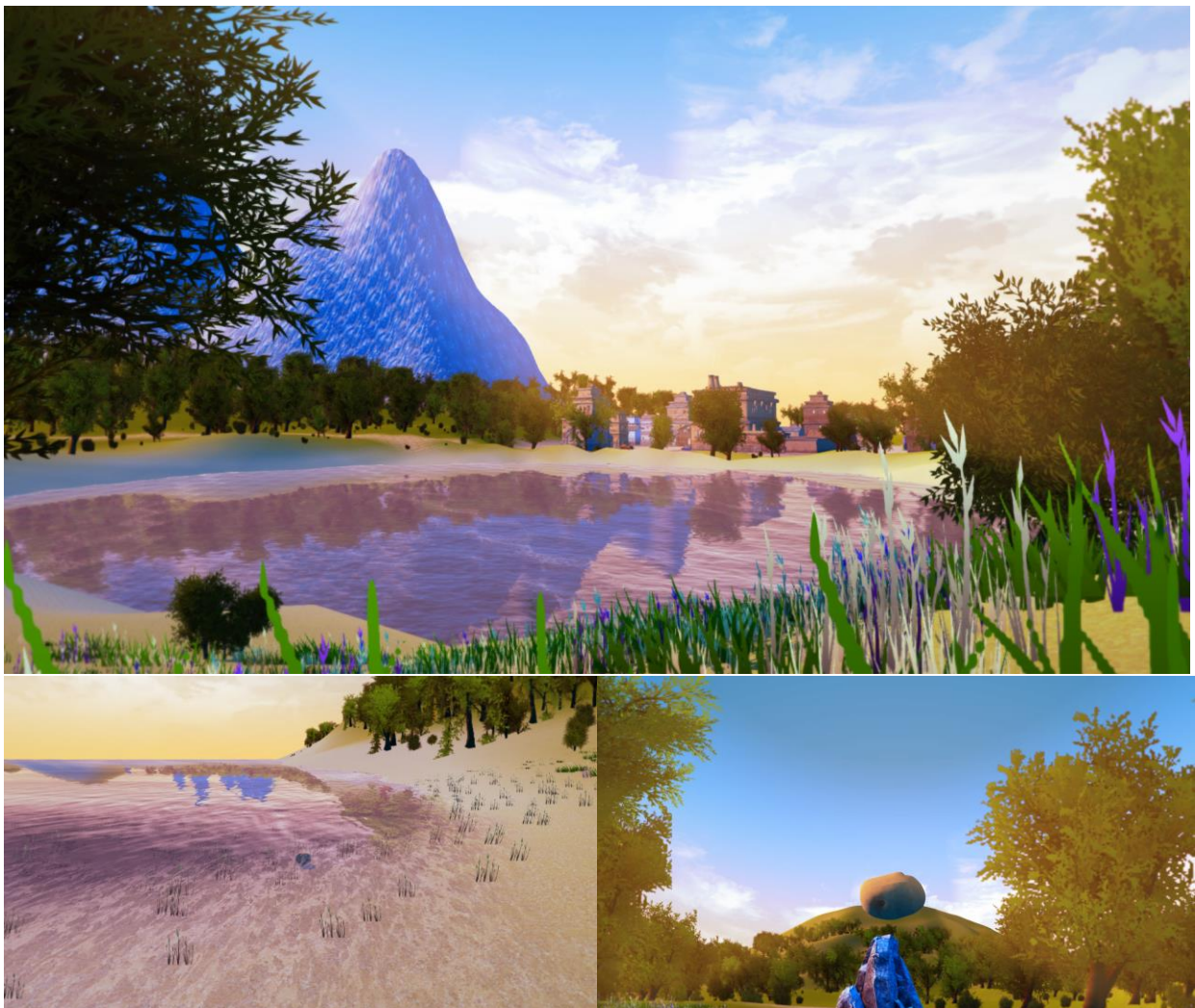


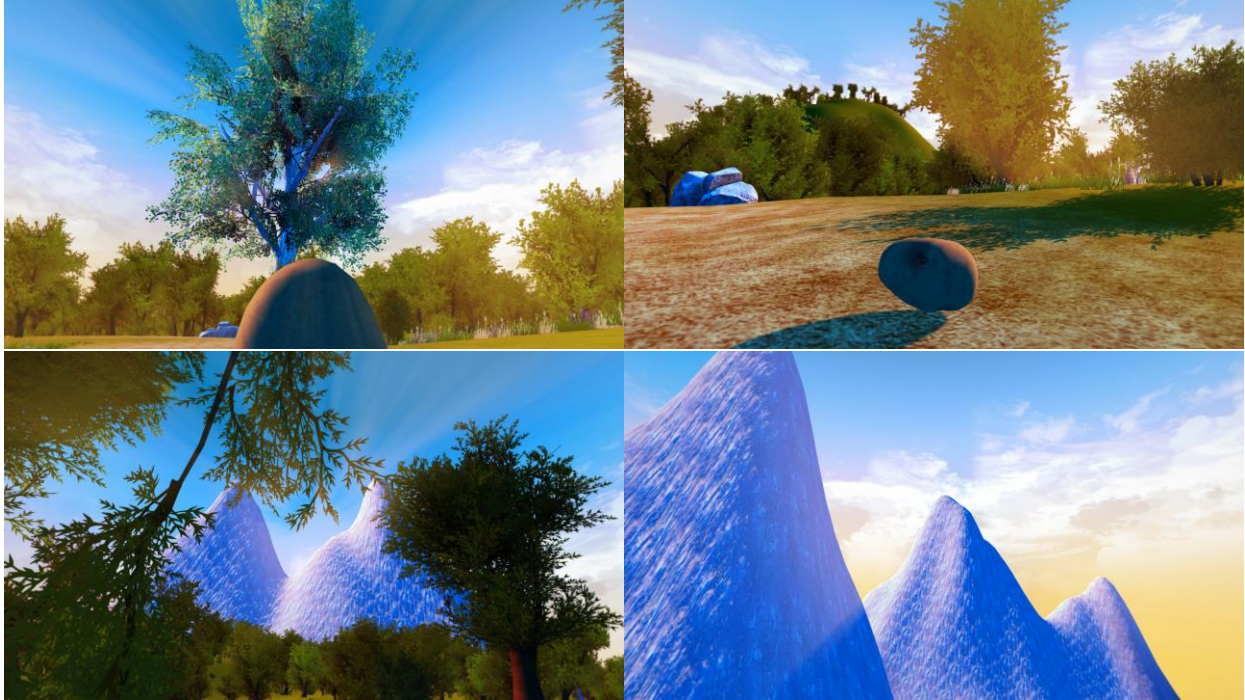
Overview of terrain in the editor menu

Unique Potato Movement: The potato moves around by rolling, sprinting, jumping, and swimming.



Scenic Locations: There are several places in the world which hosts a special landmark ranging from mountains, to hills, to a city, to small and large lakes, and even giant trees waving erratically in the wind.





Many gameplay screenshots

Installation

To play the game, simply run the “potato.exe” (Windows) or the “potato.app” (OS X) corresponding to your operating system.

Concerns

- Periodic lag spikes/stutters (a sudden ‘freeze’ framerate)
- Water rendering in front of semi-distant objects
- Rapidly jumping off of rough surfaces (confusing it for ground) resulting in a high upward speed
- Entering the border in a certain manner resulting in either escaping and/or a high upwards velocity

Additional Notes

The game is very stable and does not crash. If any errors were to occur, Unity would handle it well and continue on as consistently demonstrated during development.

The structure of the game is relatively simple. There is a world with a player controlled character with interactions only occurring when the player initiates it. Once the world and the player is fully set up, this allows easy additions of more event driven actions only to run as needed when triggered.

Resources

Broadleaf Tree. The large waving tree: Standard Assets\Environment\SpeedTree\
Broadleaf\Broadleaf Mobile.spm

Camera Collision Script. Script that controls how the camera moves:
<https://www.assetstore.unity3d.com/en/#!/content/36840>

FPS Level. Miscellaneous objects (crate, barrel, car, rocks, gas can, fire extinguisher etc.):
<https://www.assetstore.unity3d.com/en/#!/content/59359>

Low Poly City Block. Buildings (except the storage building):
<https://www.assetstore.unity3d.com/en/#!/content/2434>

Mouse Look. MouseLook Script (looks around from a central point): Standard Assets\ Character
Controllers\Sources\Scripts\MouseLook.cs

Natural Tiling Textures. Rock texture for the mountain:
<https://www.assetstore.unity3d.com/en/#!/content/35173>

Nature Starter Kit 2. Trees, bush, grass (mesh and main texture), dirt path texture, camera
shaders, and sky box: <https://www.assetstore.unity3d.com/en/#!/content/52977>

Ostrich Sans. Font used for the menus: <https://www.fontsquirrel.com/fonts/ostrich-sans>

Potato 3D Model. Model and texture for the main character:
<http://archive3d.net/?a=download&id=e56268ea>

Storage Building. Storage building at the edge of the central city:
<https://www.assetstore.unity3d.com/en/#!/content/50430>

Water. Water used in lakes: Standard Assets\Environment\Water\Water4\Prefabs\
Water4Advanced.prefab