



Highway Rush *Mini project*

By group 17.



Problem statement

The frequent repetition of visual assets, such as the frequent appearance of a particular game object in a game world, often becomes apparent to players when they encounter such repetition within a short period of time. Graphically advanced games require an increasing number of assets to hide the repetition and to create believable game worlds. So this project describes some contemporary approaches to be used in the industry to hide repetition.



Project objective

- 01 *Endless driving game through virtual highway environment*
- 02 *A challenging and enjoyable virtual environment*
- 03 *A function to randomly generate game objects In the virtual environment*



Existing system

Current generation endless racing games like “traffic racer” has endless highway track with different vegetation to drive through varying traffic density. The game has different modes like endless one/two way ,time trial ,free ride etc and has a collection of 42 vehicles to choose from. The game has pre defined object location and mesh spawning which cause it to repeating the environment



System design

Random vegetation spawning

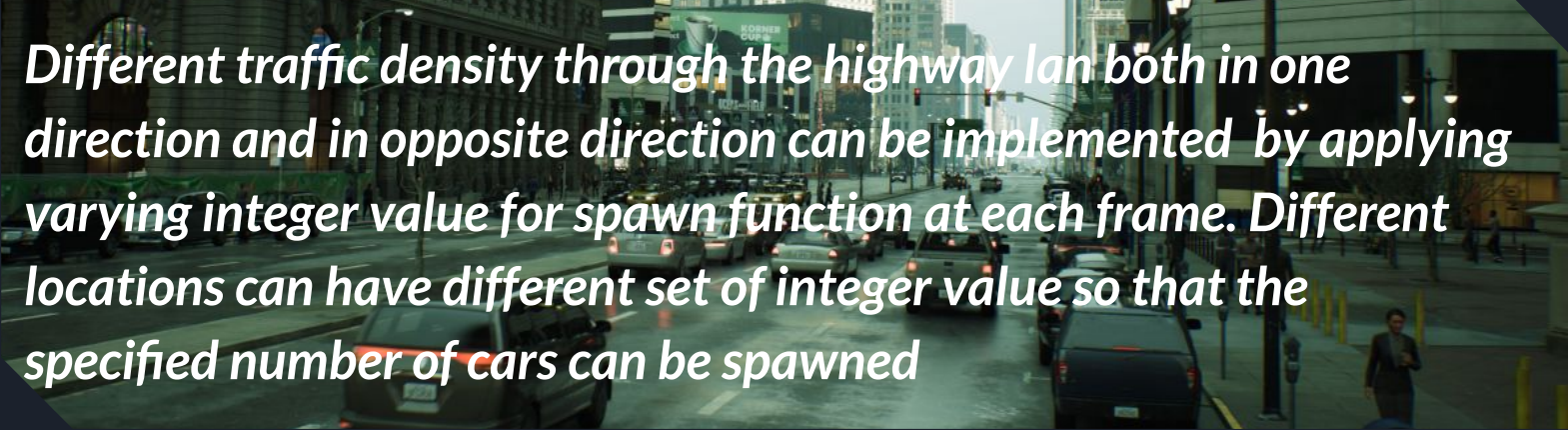
By using random generation method we can spawn desired vegetation meshes like trees, canyons, cactus in game world





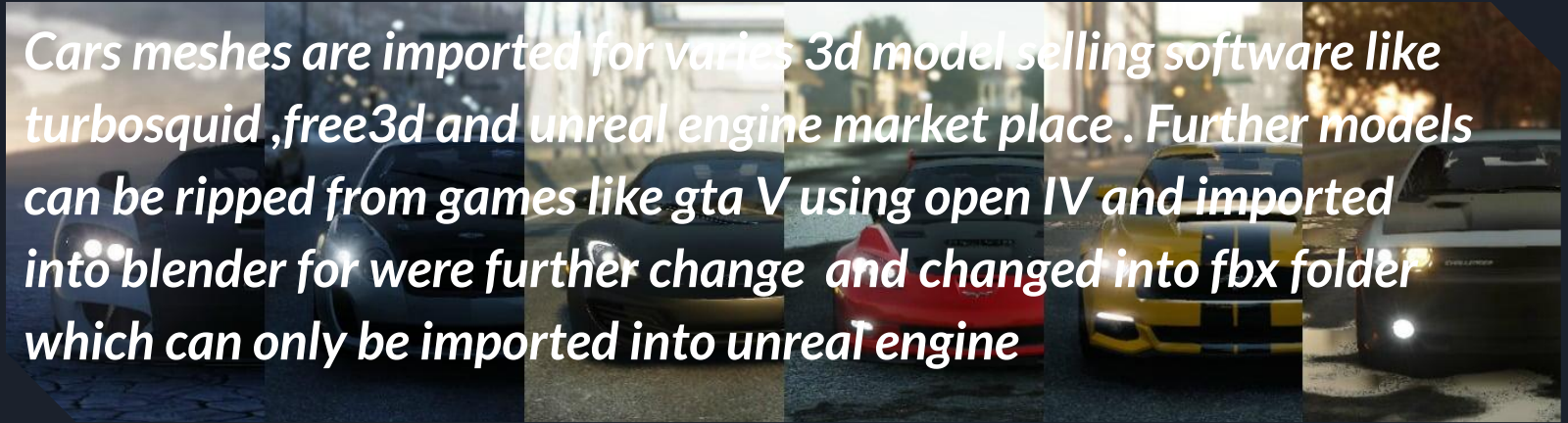
Varied traffic density

Different traffic density through the highway lan both in one direction and in opposite direction can be implemented by applying varying integer value for spawn function at each frame. Different locations can have different set of integer value so that the specified number of cars can be spawned



Car collections

Cars meshes are imported for various 3d model selling software like turbosquid ,free3d and unreal engine market place . Further models can be ripped from games like gta V using open IV and imported into blender for were further change and changed into fbx folder which can only be imported into unreal engine



Software

and

Hardware

Unreal engine 4

Blender 3.0

Photoshop

Audacity

Open IV

Android studios



*Powerfull laptop
or desktop*

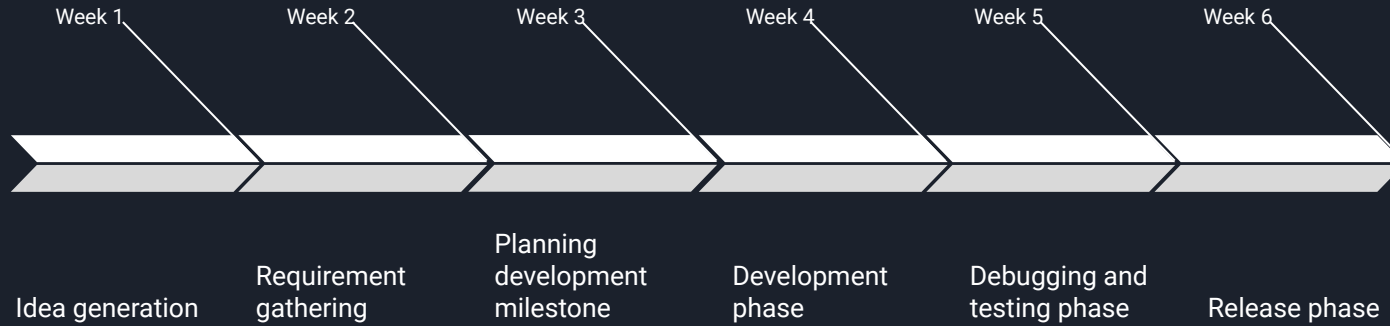
*With minimum
integrated
graphics chip*

8 gb ram

*Testing purpose
mobile phone*



Project timeline



conclusion

Using random generation method eliminated repeated assest spawning

Provided challenging and enjoyable experience to players



Future scopes

In future updates will be implemented for the application which gonna add more cars different locations etc.

In future updates the game going to be compatabile for vr device through which players can experience the game through VR and interact through it





Thank you!

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