You are now working on a game called Car Driving Online. It's a car driving simulation game, where player can freely drive his car around, collecting stuffs, making stunts, and joining online with other friends (using Photon Unity Networking - PUN)

Physics

* You are about to implement the buoyancy effect for a special car type, which can move freely above the water level. How can you solve that problem using PhysicsX?

Answer : (physics.gravity) on the car and then we create waves in the water using the formula (1,0,1) Mathf.Sin(). because it uses a rigid body

then the car will have a buoyancy effect...then we can use a meshfilter on the plane (water) to meshfilter following up and down waves.

Architecture Design questions

* You are about to implement the collection system, which handles 3 things : allows the designer to manually place tokens around the map, allows the player to collect those tokens by colliding with them, and allows the player to unlock new character skins / vehicle skins / etc when collecting enough tokens. How do you design that system, in such a way that least-dependant on other gameplay elements, because our current codebase is quite chaotic.

Answer : untuk point 1 yaitu meletakkan token secara manual di sekitar peta, kita dapat membuat tiap user berbeda lokasi untuk tokennya kita bisa gunakan random range di beberapa titik tetapi dengan jumlah yg sama nilai tokennya (tidak berlaku untuk main bareng) ini akan mengurangi tabrakan antar user

nanti kita bisa tambahkan fuel pada masing masing user seperti nfs no limit membatasi aktifitas user sebanyak 8 aktifitas perhari. ketika melakukan 1 perjalanan maka fuel-nya berkurang 1 dan jelang 1 jam maka fuel akan add (1) lagi sehingga jika dalam satu waktu user menghabiskan fuel-nya jika ingin bermain lagi dia bisa beli dengan uang di shop atau tunggu / 1 jam untuk mendapat 1 fuel

Networking

* The game uses PUN, each player updates his location to others. There is a reported exploit that allows cheaters to cheat by using Cheat Engine to speed up the game. How is that possible ? And what can you do to minimize impacts from that exploit?

Answer : mungkin kita beri kondisi jika time di smartphonenya tidak sama dengan time server karena di percepat tadi...maka game crash...atau ada notifikasi kecurangan

* You are about to design the synchronization mechanism for the game. Each player controls a vehicle, which needs to sync properties below. How do you synchronize those properties?
* Position of the vehicle
* Rotation of the vehicle.
* Wiper State: 3 state - on , low, high
* Rear light State: 3 state: off , on , blink
* Sidelight State: 4 state: off, on , blink-slow, blink-fast
* Horn: player can press and release the horn button, to start and end the horn sound ( he sound continuously plays when player holds the button)

Answer : mungkin kita bisa menggunakan playerpref untuk set data seperti posisi dan lain lain serta kita bisa get data tersebut ketika user login atau kondisi tertentu dimana kita bisa set seperti button save.