

The game of snake on a PC vs smartphone

PC:

Pros:

- Larger screen

Cons:

- Harder to control with pad without mouse

Smartphone

Pros:

- Portability(you can play wherever you want)

Cons:

- Fingers can cover little part of the screen

a. One of the alternate interfaces that can be used to play a game like snake is an Mixed reality headset like the microsoft hololens. The reason why this could be such a apt interface is that the head mounts or AR/VR rigs already built in motion and orientation sensors making a self contained control interface and a immersive reality experience. The potential design issues could be that the technology is fundamentally different from other interface designs that the game will need to be heavily modified to accommodate for these sensors. There can also be a steep learning curve and also for some Individuals the experience of a AR/VR can be a bit disorienting. Not to mention the huge offset in the cost of the equipment required.

Brain-Computer Interfaces:

Scenario

- People who play the game have to wear headsets to play the game. Headsets detect changes in neural functioning in players' brain. Therefore, players can use their thoughts to manipulate worms.

User group:

- The new design game is designed for adults because players should be able to concentrate for a long time, which is not a task that children may be able to do.

Pros:

- It does not take any physical energy to play

Cons

- It takes brain power and concentration

Pen:

Scenario

- The pen-based version enable people to use stylus, instead of fingers, to control the worm.

User group:

- Both adults and children because even children can use stylus without making many errors.

Pros:

- The area touched with pen and screen is less, which endows players with better knowledge of direction that the snake goes.

Cons:

- It takes brain power and concentration

c. The Microsoft hololens and other AR technologies like it work by mapping a 3D grid view of the space that it is around and make a solid mesh of the spacial orientation of the actual subject and the space around to have a more accurate interpretation of the AR world. This has a lot of advantage when it comes to games like these. The real space around us can be an obstacle course the snake needs to navigate. The user can have a bird's eye view and also a 1st person experience. Since the interface controls are done with the headsets itself. It gives a more immersive experience and give a more exciting game for the user. Multiplayers can also be supported.

Air-Based Gestures:

Scenario

- It's like Sony's EyeToy. The motion-sensitive camera captures players' hand-gestures that players wave their hands and the snake goes the direction as its direction.

User group:

- Just like EyeToy. It is designed to appeal to anyone, from young children to grandparents, and from professional gamers to technophobes.

Pros:

- It can increase the extent of entertainment and make players exercise more

Cons:

- It's difficult to recognize and delineates the players' gestures.