**MindWorks**

**Project Background**

MindWorks is an entertaining cognitive simulation game developed as a collaboration between Temasek Polytechnic, the Centre of Aging Studies and an external Japanese Company. MindWorks consists of multiple small mini-games each training a different area of the brain. Through a variety of different games, MindWorks can provide a complete package for keeping the mind active.

Each mini-game has a specific type namely memory games, arithmetic games and speed of processing games. The games can be independently played and usually only trains one to two areas of the brain. However, besides just simply training the brain, these games are also design to be entertaining for players of all ages. Several game enhancing features like competitive scoring makes each mini-game a fun and an enriching experience.

**Key Technologies Used**

* Unity 3D
* Adobe Photoshop
* Mecurial SCM
* Source Tree

**Key Benefits**

MindWorks hopes to help people remain mentally active by providing entertaining and mentally stimulating games for people to play. It is important to note that the primary purpose of the game is not to improve intellect or make a person smarter.

A scientific study indicates that cognitive brain training programmes can help to improve cognitive processing power. Furthermore, other studies suggest that cognitive simulation not only improves processing speed but also transfers to everyday activities and functions. The impact of cognitive training has been shown to improve memory and attention.

**Potential Opportunities**

Singapore is suffering from an ageing population and studies have shown that the number of elderly citizens over the age of 65 is likely to triple to 900,000 by the end of 2030. This worrying trend brings about another serious repercussion.

Research has shown that the early onset of dementia can start from ages 30 to 40 years old but is typically uncommon to see such an early onset. It is, however, more common to see people of ages 50 and above with the disease. With so many people above the age of 50 in Singapore by 2030, the occurrence of dementia is likely to increase as well.

This game hopes to elevate this trend by helping the older people remain mentally active. A vast number of scientific studies have shown that mental inactivity is one of the primary risk factors contributing to rapid mental decline which will eventually lead to dementia.

In addition, the game can also benefit people currently suffering from dementia. Recent studies have shown that cognitive simulation therapy can help to improve both cognitive function and quality of life in people with dementia and in particular Alzheimer’s disease.

Although it cannot be said that this game will completely prevent the onset of dementia, it can, however, delay or lessen the symptoms of this terrible disease.

This game has a lot of potential for growth and development in Singapore and many other countries around the world suffering from an ageing population.

**Project Team**

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