Super Starfish Mania

Nick Cleintuar, Martijn Gribnau, Jean de Leeuw,
Benjamin Los, Jurgen van Schagen, Fanny Lie,
Ben Kybartas, Rafael Bidarra
Delft University of Technology,
Delft, The Netherlands.
N. Cleintuar | M.M.W. Gribnau | J.A. de Leeuw |
B.E. Los | J.T. van Schagen | F.F.Lie@student.tudelft.nl
B.A. Kybartas | R.Bidarra@tudelft.nl

Abstract

Modern technology simplifies our lives greatly. To the point where many things can be done from the comfort of your chair. This has led to an increasing amount of people living a sedentary lifestyle, which brings about certain health related risks. Finding and maintaining motivation to overcome this lifestyle is often difficult, and thus *Super Starfish Mania* is here to help! *Super Starfish Mania* is an android game that promotes standing up and moving around in the form of small games that can be completed every hour. You can share your rewards with your colleagues and show them off on a big screen for everyone to see. It is also possible to play together and collaborate to complete these games.

Author Keywords

movement based gaming; mobile gaming; collaborative gaming;

Introduction

Super Starfish Mania seeks to help people improve their sedentary lifestyle by occupying them each hour with engaging small games that will promote physical activity from the player. Succeeding in doing so will earn the player rewards, which they can use to show off to friends and colleagues. The rewards can also be displayed on a big screen for everyone to see. Players can collaborate in these small games which allows for a shared effort in obtaining rewards and changing one's lifestyle.

Game Concept

The objective of *Super Starfish Mania* is to expand your collection of rewards (which are fishes). Every hour, the player will be notified of the possibility to go on a so called stroll. These strolls are five minute breaks from the activity the player was doing beforehand. During these strolls, the movement of the player is measured, and based on this measurement, the game may decide to allow the user to play a small game.

The games consist of a small objective that can only be completed by certain physical movements of the player. The exact objective and manner to complete the objective differ from game to game.

At the end of the stroll the game will generate fishes of different rarities depending on how well the player did during the games. These fishes will then be added to the player's personal collection.

It is also possible to play games together. During the stroll a *Host* and *Join* button will appear. One of the players has to press *Host* and a number will appear which the second user has to fill in and press *Join*. The two phones will then connect over the local network and a multiplayer game will start.

Players can decide to form groups together, which will allow these players to donate their fish to said groups. The fishes donated to the groups can then be displayed on a large screen for everyone to see.

Target Audience

Super Starfish Mania is designed for everyone who wants to improve their sedentary lifestyle but needs a little help and motivation. Office workers are a great example, since these jobs are sedentary by nature and consist of a large number of people to form groups with.

Requirements

Super Starfish Mania is a simple game with little requirements. The main requirement is that users need to have access to a relatively modern android phone and some space to move around.
However if people want to form groups and play collaboratively there needs to be a onetime additional setup. In this case a server needs to be setup and a large screen needs to be connected to a computer with internet access. This can easily be done by one person with experience, which makes the application easily accessible for the rest of the users.
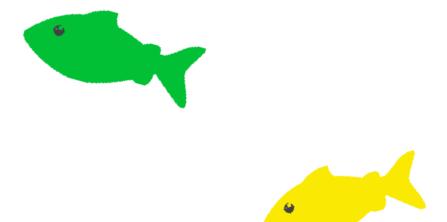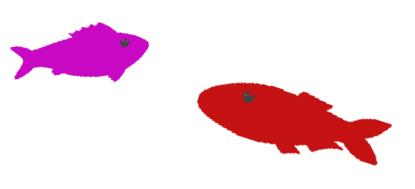
Why it works

There are several reasons that make *Super Starfish Mania* attractive compared to other solutions that try to improve the increasingly common sedentary lifestyle.

The first reason is that it makes use of hourly non-intrusive reminders to increase the awareness of the user of his or her lifestyle. The application does not force the user in any way, so it can be easily discarded at inconvenient moments.

The second reason is that it rewards physical activity of the user in the form of collectibles, making them feel good about improving their lifestyle whilst also giving them something to strive for.

The last reason is that participating in groups creates small amounts of social pressure, because the collectibles that the player donated will be visible for everyone, so you players tend to want to show their rarest collectibles, which in turn motivates other players to try and match or better these collectibles.

The Collectibles

In order to keep the players striving for more rewards there need to be a lot of possible rewards. To achieve this, *Super Starfish Mania* automatically generates collectibles. Each collectible consist of two components:

Colour: Each collectible has a randomly generated colour. The colour of the collectible partly determines the rarity of the collectible, so certain colours are a lot more common than others.

Shape: Each collectible has a certain shape, that together with the colour of the collectible determines the rarity. Each shape has the same chance of being generated, but some contribute to a higher rarity than others.

The combination of these two components allows for a huge amount of different potential collectibles. It also allows for easy expansion with new collectibles.