CHI PLAY Outline

Games Context Group 1 (a.k.a. Funky Donkey Studio)

*1. very clearly and concisely <u>define</u> the problem posed by your context (**no sentences**, only bullet hierarchy of 3-5 bullets per item):*

characteristics

- Game to be played by queue participants.
- Game should motivate players to work as a team.
- The use of external devices is recommended (audio / camera detection, motion sensing, VR / AR …)

constraints

- Must work on an actual queue.
- Game has to respect queue dynamics.
- Software has proper architecture, code is well tested and extendible.
- Must be written in Java

challenges (design and technical)

- Not exactly the type of place to play a game: difficult to make people participate and not feel awkward.
- Game should be easy to drop in and out of.
- There are many different types of queues.

*2. very clearly and concisely, describe the solution you propose (**no sentences**, only bullet hierarchy of 3-5 bullets per item):*

main idea (game design, game mechanics)

- Penguins slide over wave horizontally in one orientation.
- Targets must be hit and obstacles avoided.
- Penguins are saved when they reach the end of the screen.
- Penguins saved in succession increment the combo count.
- Combo count is lost when one mistake is made (penguin hits obstacle or misses target).
- Camera detection is used to detect the people in the queue and use their height to form a dynamic wave on the screen.

why it works

- Penguins are cute, the 'story' encourages players to join / stay.
- Combo count is addictive.
- Smooth physics feel rewarding to interact with.
- Players all manipulate the same wave, so they work as a team each contributing to a whole. This feeling of teamwork will put a smile on every player's face (unless he is killing all the penguins in which case he is a bad penguin saver & unskilled wave manipulator).
- Interesting way to make queue participants interact.

what kind of player interaction (also what technology is required?)

- Game works on straight section of queue.
- Setup is specific:
    - Requires a static background for the camera detection.
    - A screen needs to be positioned next to the queue and facing the queue orthogonally.
    - If the queue turns or is more that one person wide it does not function properly, but can still be playable.
- Players use movements (the highest points of their silhouettes) to manipulate the wave.
- Players work together as a team, all manipulating different parts of the same wave. Players must form slopes to make the penguins jump / duck around obstacles and reach the targets.

limitations and issues

- Game involves no attachment to players (no characters, no levelling) but needs to make the player feel like an indispensable part of the game.
- No ‘game over’ and no levels. The tight gameplay is the main motivation to play the game.
- If the lighting / background changes the camera detection delivers incorrect data.
- To have a large section of the queue play many people need to be detected by the camera(s).
- Game must allow players to change positions (walk along queue) without having negative impact on gameplay.

3. write the FULL paper abstract: ***only*** *4-6 sentences*
(see reference [1]., slides 13-14)

Queues have been around since the law of the jungle has been abandoned, and they are outdated, boring and time consuming structures. Time spent waiting is time wasted and possibly even frustrating if the waiting process does not occur in comfortable conditions. Entertaining people present in such a situation would improve their quality of life and could make them have a more positive mindset towards the event they were queuing for. Our solution not only entertains queue participant but also allows them to experience a group dynamic with other people in the queue making them enjoy the company of their fellow queue members instead of wishing they were the only one there. Who would have thought queues could ever become enjoyable experiences instead of time consuming structures.