

Arca

"The room of physical puzzle in the third dimension".

The Arca game is based upon two player gaming where the players are a physical part of the game. The game takes place in a room where both ceiling, floor and walls are a part of the game surface. Each level in the game are based upon puzzles or logical problems.

At the beginning of each level there will be a title for the level which also acts as a clue for what needs to be performed by the player to finish the level. This is the only information that will be given to the player as how to play the game since its part of the game, to figure out how to play each level.

Each level can be finished by a single player but to execute each level as fast as possible the levels will be design so that both player need to help each other to finish the level with a lower time rating. In this stage there will be five levels in the game that is co player design and a sixth level which is a "sudden death " stage between both players, only leaving one player as the winner.

Arca also has a high score which is based upon how fast all the levels are executed but the high score will only be ascribed to the player that wins in the last level.

The graphic interface for Arca is inspired by early hand-held console games from the 80s and yearly 90s with low levels of graphic, geometric figures and annoying sound. Each level in the game will have a different way of playing it but the interaction uses simple principles as used in games like Tetris . Some level(s) will be inspired by IQ tests where the mission is to find logical patterns and make mathematical calculations with physical interaction.

All levels will be designed so that some form of special skill is needed from the players like high height, speed or intelligence so that co operative playing will result in a faster completion time with the exception of the last level. The last level will consist of different tasks which acquire both physical and mental ability's abilities so both players can compensate for there weaknesses.

The typical player for this game is someone hows who enjoys puzzle games and like intellectual challenges. Its not for gamers that enjoy adventures and story driven games but more for the gamers that prefer arcade like games which are meant to only be played for a couple of minutes and the goal it is to get your name in the high score list.

Arcas opportunities emerge when interface is allowed to breathe and flex in physical space. Direct contact between users and content become possible. A user is given the freedom to interact with objects and with others in not one but many ways.

Some of these methods may be predicted while others maybe constructed by the user. It seems that such possibilities for usage and re-appropriation are rare with the conventional interfaces that define desktop computing.

Conventional keyboard and mouse interfaces might look as a binary condition where a single user is either interacting or not interacting with the system. Physically integrated interfaces that use human movement and spatial orientation eliminate this oversimplified condition. Room is created for ambiguity, nuance and the unexpected¹

The target group for this game is not necessarily only people that are interested in computer games. One of the core thoughts behind Arca is to explore what a game is, by using a form that is very similar to a artistic installation with abstract graphics and sounds .

We also want to play with the space in the room using a mix of bright white surfaces and switching to completely dark surfaces with white interface details.

An example of a levels level is as following, it starts with a sign on the wall -catch the dot. Then a dot appears in the room and after a few seconds the dot disappears and reappears in another place. If one of the two players touches the dot a new one appears but this time with a shorter interval.

The mission in this level is to catch all the dots but as they appear and disappear with shorter intervals for each dot that is caught, it gets harder and to be officiant the players should place themselves in a strategic way to cover the room so one or the other player can catch the dot.

The platform for the game will probably be a pc where we use a projector and for the project prototype we are thinking of focusing upon creating one wall and realising 3 of the levels.

¹ Karatzas Evan. **Proximity and Experience: New Rules for User Interface**, ©2002-2005.