**Theme: Puzzles Vs. Problems**

As both games programmers and designers, being able to deliver that key moment of fiero to the player is an important skill to have. By balancing the scales between frustration and relief as we lead the player through intuitive yet challenging problems, we create hard fun for the players.

The brief invites you to explore the design of problems. Puzzles are created with one correct solution in mind and are designed to be solved in a specific way, however, a problem is not created with one solution in mind. By creating our own mechanics, we can create problems in which the player is not trying to discover *the* solution, but the player is now inventing a solution. By doing this, we invite creativity and emergent gameplay. Each player could approach the problem different and each have their own unique solutions.

To explore the difference between puzzles and problems we looked at games such as Portal and Poly Bridge. Portal contains puzzles that are intended to be solved in a specific way, this means that many players will complete every puzzle in the same way. Poly Bridge, however, takes a different approach; they present the player with a number of mechanics and allow the player to use these mechanics to create their own solutions to each level. This means that many players will find their own unique solutions and it is uncommon for two players to have the same solution to a level.

The game will be developed for Android and iOS devices.

Whenever a player completes a level they will have the option to upload their solution. This allows players to share their knowledge of the game, new ideas and allows them to learn from each other.

**Demographic and Psychographic**

Our demographic will be made of up players aged 20 - 40, these players will be predominantly female. Our psychographic will be core gamers. Their main interest in games are challenge, strategy and power. Their ideal game will put them up against difficult content that can be beaten by strategic thinking and skillful implementation.

**Playstyle, Frequency, Duration of gameplay**

Our duration of gameplay will be between 15 - 30 minutes, this gives the player enough time to complete one or two levels. Our players will open the game between 1-3 times per day on average.

**Artstyle**

//TODO: Add more of the demographic research that I have collected into the bibliography, perhaps use in-line referencing when talking about our demographic and psychographic.

**Bibliography**

Areliusarson, A. (2013) *Designing Computer-Games Preemptively for Emotions and Player Types*. [Blogpost] (19 June 2013) Available Online:<http://www.gamasutra.com/blogs/AreliusAreliusarson/20130619/194574/Designing_ComputerGames_Preemptively_for_Emotions_and_Player_Types.php> [Date of access: 04 July 2017]

Bradley, S. (2011) *3 Design Layouts: Gutenberg Diagram, Z-Pattern, And F-Pattern.* [Blogpost] (7 February 2011) Available Online:<http://vanseodesign.com/web-design/3-design-layouts/> [Date of access: 18 October 2017]

Brown, M. (2015) *Puzzle Solving… or Problem Solving? | Game Maker’s Toolkit*. [Video] (18 June 2015) Available online:<https://www.youtube.com/watch?v=w1_zmx-wU0U> [Date of access: 20 June 2017]

Henrik, A. (2012) *Art and Theme in a Logic puzzle game* [Blogpost] (12 May 2012) Available Online:<http://www.thevoxelagents.com/2012/05/art-and-theme-in-a-logical-puzzle-game/> [Date of access: 10 October 2017]

Hwong, C. (2016) *The most popular mobile game genres: Who plays what, when?* [Blogpost] (14 December 2016). Available online:<http://www.vertoanalytics.com/the-most-popular-mobile-game-genres-who-plays-what-when/> [Date of access: 10 October 2017]

Juul, J. (2002). The Open and the Closed: Games of Emergence and Games of Progression. In: *Proceedings of Computer Games and Digital Cultures Conference.* Copenhagen: Tempere University Press, pp.232-329.

Lazzaro, N. (Date unknown) *The 4 Keys 2 Fun*. [Online] Available online: <http://www.nicolelazzaro.com/the4-keys-to-fun/> [Date of access: 08 October 2017]

Short, E. (2008) *Emergent Puzzle Solutions* [Blogpost] (13 February 2008) Available online:<https://emshort.blog/2008/02/13/emergent-puzzle-solutions/> [Date of access: 08 October 2017]

Researched games

Poly Bridge:<http://polybridge.crycactus.com/>

The Witness:<http://the-witness.net/>

Infinifactory:<http://zachtronics.com/infinifactory/>

SpaceChem:<http://zachtronics.com/spacechem/>

Big Pharma:<http://www.bigpharmagame.com/>

Minecraft:<https://minecraft.net/en-us/>

Brain dots:<https://www.facebook.com/braindotsapp/>

Portal:<http://thinkwithportals.com/blog.php>

Slime Rancher:<http://slimerancher.com/>

Door Kickers:<http://www.inthekillhouse.com/doorkickers/>

Township:<https://www.playrix.com/township/>

Factorio<http://store.steampowered.com/app/427520/Factorio/>

Minecraft<https://minecraft.net/en-us/>

Elder scrolls online<https://www.elderscrollsonline.com/en-gb/home>