**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 can 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. Each player could approach the problem different and each have their own unique solutions.

To explore the difference between puzzles and problems we can look at the games *The Witness* and *Poly Bridge*. Most of the puzzles in *The Witness* are created with a specific solution in mind. While *The Witness* presents the players with multiple puzzles that can be completed in different orders, each of the puzzles can only be completed one way. However, this still leads players on predictable paths to finding the intended solution. *Poly Bridge* takes a different approach to this, by giving the players a variety of building materials and various gaps to bridge*.* This allows players to solve each level in entirely different ways by making different use of the mechanics and tools at hand.

The game will be developed for PC, Andriod and iOS devices.

The game will be playable on all devices and also include a cross-platform level editor that allows players to create their own levels on PC and Mobile. Players can then upload them to an online database of user-created levels. From here, other players will be able to download and play them.

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

-Psychographic

-Play style (Frequency, duration of play)

-Art style

**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]

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]

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]

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]

Researched games

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

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

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

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

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

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

Big Pharma: [http://www.bigpharmagame.com/](http://www.bigpharmagame.com/s)

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

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

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

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