



RogueGen

A PCG ADVENTURE
PROTOTYPE

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PROTOTYPE

For the prototype we created a two part board game, focused on the main features of RogueGen, exploration of a procedural generated world and a combat system that encourages team-work. The game is designed for up to five players, four of which are regular players, simulating actual players in the later game and one that acts as a computer, designing the challenges in the game and controlling the NPCs.

The first part, the world module, allows the players to explore a randomly generated world. In that world they can encounter enemies which will start fights, played out in the second part, the combat module.

WORLD MODULE

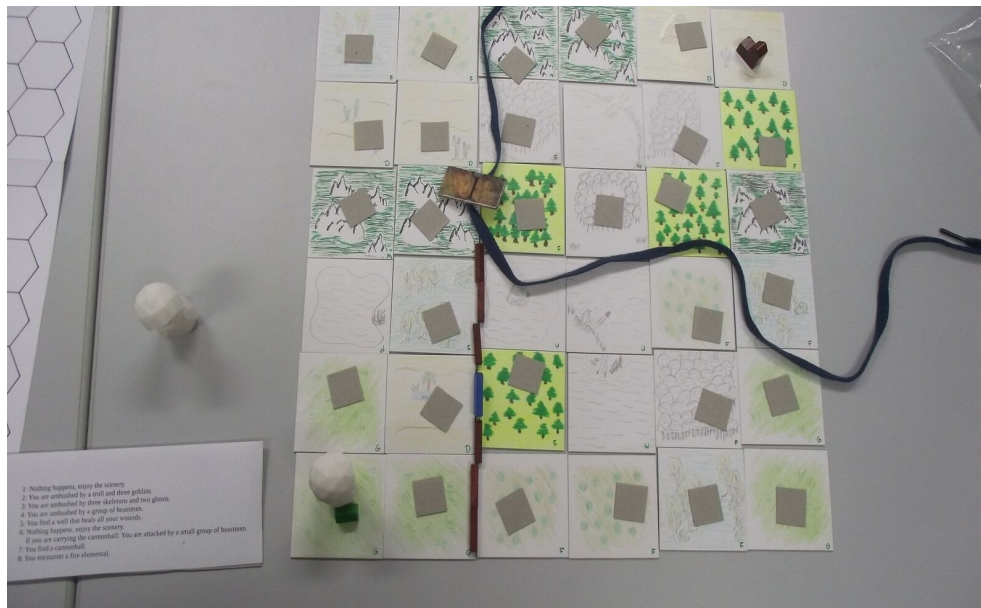


Figure 1 – World Module Board

The board is made out of 36 tiles, each demonstrating a biome, such as forest, water or desert. The map is parted into three areas by a river (blue shoelace) and a cliff (brown Catan streets) that simulate borders that can not be crossed by the players. Both of those natural borders each have a point where it can be crossed, but only if a certain event is triggered beforehand.

The river has a drawbridge (cardboard card) that is initially closed and can only be crossed by the players, if they obtained a cannonball beforehand, that is then somehow used to trigger a mechanism to open the bridge.

The cliff has one spot, where the players could get up, but it is blocked by a magic ice wall (stack of blue Catan streets). The players have to obtain a weapon that is able to deal fire damage, to melt the wall and get up the cliff.

Two tiles are defined as starting point and goal, indicated by a Catan village and a Catan city. The rest of the tiles all have a chip with a hidden number on it. If the players walks on a new tile, they look up the number of the chip on that tile and react to the event associated with that number.

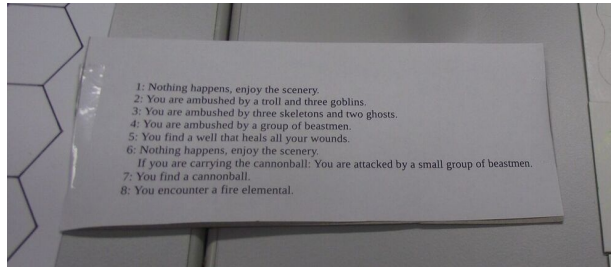


Figure 2 – Available Events

Before the game starts, the tiles are shuffled and put in a 6x6 grid. The computer player then places all the points of interest, such as the river, the goal point and all the event chips. He has to place those in a way that make the map interesting and possible to play. The goal has to be reachable from the starting point and the events that allow the players to cross the river or the cliff, have to be placed before the respective bottleneck.

This was modeled to simulate how the world will be build, how the basic terrain is generated, how points of interest will be placed on it and by that how the world is interesting to explore for the players.

COMBAT MODULE

If the players start a fight in the world module, they go to the combat module to play out the fight.

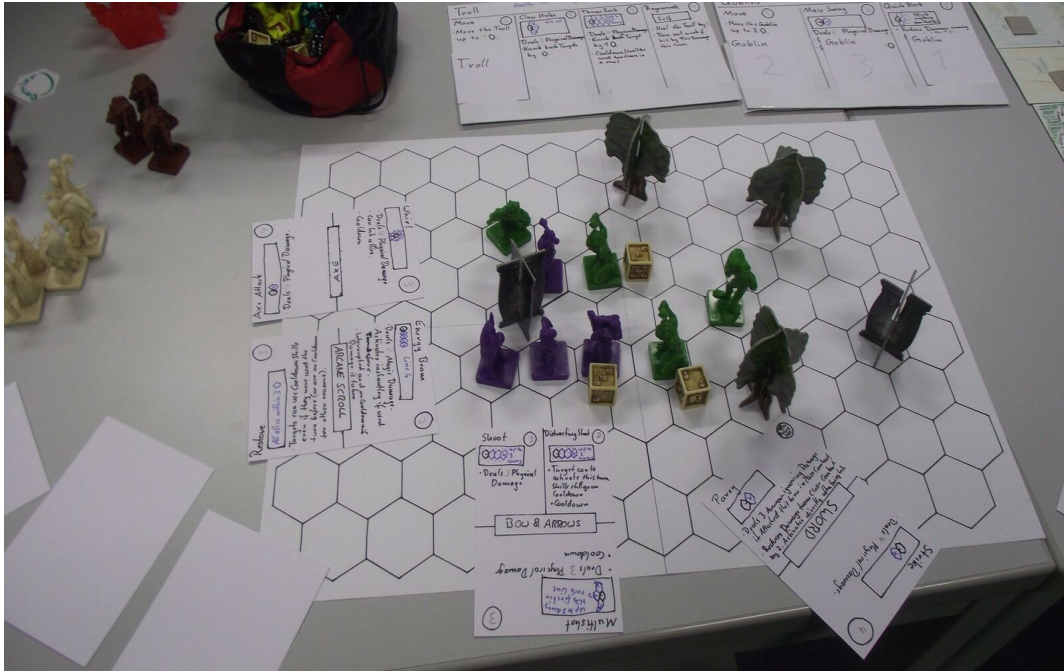


Figure 3 – Combat Board

Here the players use miniatures of themselves and their enemies on a hexagon board. All actors in a fight have cards, symbolizing their weapon, allowing them to use different skills, according to their weapon or move across the board.

Each round all players choose an action, the computer player chooses one for each enemy. Then all actions are played out, ordered by a speed value, assigned to each possible action.

Damage values done to an actor are displayed by stacking dice of equal value next to them.

Players and enemies all have certain health values, if that value drops to zero, they get removed from the board, if all actors from one faction are removed the other faction wins.

This fighting system was designed to depict the interactions the players and their enemies can have in the actual game. While the real time character of the fights can not be captured in a round based board game, the decisions the players have to make in combat and the interactions between their abilities are simulated quite accurately.

EXPERIENCE

Our overall experience playing through our prototype was very positive, as we found our core features represented quite well.

The terrain, even just through random placement, felt like an actual map and the simple puzzles, build by the natural borders in the map that are placed by the computer player, made the world interesting to traverse.

Problems we detected were for once in the combat module, that we need to focus on balancing the health points of the enemies, as it took too long in the prototype to bring them down. This balancing issue has to be reconsidered in the real time environment of the actual game though.

To address this in some way we agreed to scale the power of the weapons found in the game according to the area they were found in. Killing enemies will allow the player to pick up their weapon, which may be stronger or have more synergy with other team members skills so the player has to decide whether to pick it up or leave it behind.

We decided on restricting the healing capabilities of the players to only consumables as the players could otherwise just wait after a fight to completely recover them self, creating a very boring section in the gameplay.

Also a part that will have to be reworked is the situation where the group of players get into a fight, while one of them is holding the cannonball that is needed to cross the bridge. Until now we designed the carrier or the ball to be passive so the others would have to defend him, creating a new element of gameplay, but it turned out that then the carrier was put in a rather boring situation. One approach we thought of was to give the carrier new abilities associated with the cannonball, such as throwing it to inflict damage.

Feedback Changes

From the feedback we got from the other teams and from what we reevaluated ourself, we made some re-designs and re-focused on our two main goals.

For that we removed the aforementioned “Statue Puzzle” as it served no particular purpose and only made the exploration of the world feel forced.

To make the world still interesting we came up with small challenges in the world that should incite the players to explore the world, rather than artificially give them a made up task. Those challenges will be small puzzles, similar to the blocked passages in the prototype. They should feel natural, like some task to open a bridge, that would otherwise block the players way to the other side of the river.