Summary and solution Fact sheet

Below is a fact sheet containing the major problems we encountered when undertaking the clients request.

|  |  |
| --- | --- |
| Problem | Solution |
| Deciding on what game to make. As the client requested a videogame that can be played with a young child, the game would need to encourage interaction between the two players. | The team decided that the game would be a co-op multiplayer game, with the younger player being placed on the back of player 1. This meant that the second player would not need to manage any form of character movement, which may be difficult for the child to do. The younger player would be able to fire multiple colors of homing projectile, each doing different things. This would be visually interesting for the child, while also being useful for the other player, who is in control of the main character's movement. It would also encourage communication between the two players, as the older player could suggest to the younger child what they should shoot. The team also decided that the younger child’s character would be an animal, specifically a squirrel, so that they were playing as a cute animal. |
| Deciding on the best way to communicate between team members and the client. Communication between team members and the client is very important, so it was necessary to decide on the best way to keep each other and the client updated as easily as possible. | The team decided to create a Facebook Messenger group and a Discord server. The Facebook group would be used mainly for team communication, as it is easily usable on mobile and PC. For communication with the client the team decided to create a Discord server. This was for multiple reasons, the first being ease of use. Discord allows easy access to voice communication, which allowed the team and the client to speak to each other with ease. Discord also allows large amounts of text to be sent in a single message, which meant the client could send feedback on the game with ease. Lastly, Discord also allows for screen sharing. This meant that, in the client meetings, we were able to show him the progress we had made and he could make suggestions for the project live. |
| Finalising game idea. Once we had met with the client and discussed our initial concept, we were able to come to a final decision on what the game’s mechanic would be. | The client and the team decided to stick with the initial concept. The team decided that the game would need two controllers, one for the child and one for the adult. Player 1 (the adult) would have access to a much wider range of controls and movement, whereas player 2 (the child) would only be required to use the joystick and the A, B, X and Y buttons. This was for two main reasons, the first being they are the only colored buttons on a standard X-Box controller. This would be easier for the child to see and press than using the shoulder buttons for example. The second reason was based on the mechanic of the game. Player 2 can shoot 4 different colors of projectile, and these colors would correspond with the colors of the four face buttons, which would be easier for the child to understand. |
| Visual style of the game. Now that we had decided on the mechanic of the game, the team needed to decide on what the game should look like. | The client recommended to purchase a bundle of 3d assets that we could use. This would massively cut down on the time spent creating the 3d models for the game, and would allow for more time to be spent coding and creating the levels. |
| Extra assets. Once the team had decided to use the 3d asset pack, we quickly realised that it lacked some of the assets that we would require if we were to create the game we wanted. | The team decided to create the extra assets required ourselves. As most of the necessary extra assets did not require movement, it was unnecessary for the models to have rigs, which made the asset creation process a lot easier. |
| Extra game mechanics. Now that the team had decided on the style of game that they were going to create (2.5D co-op platformer), We needed to decide on extra mechanics to add more depth to the game. | The team decided to finalise the decision to have player 2’s projectiles home in on enemies to make it easier to hit enemies and interactable objects. We also decided that player 2’s projectiles have different properties based on what color projectile was shot. For player 1, we chose to add a roll button to avoid enemies and their projectiles as well as a parry move, which would stun the opponent, allowing for the player to attack freely for a few seconds. We also decided to give player 1 a combo counter, which would reward the player by giving them extra health each time the combo meter reached a multiple of 10. |
| Tutorialisation. As the game is intended to be played with young children (who may have trouble reading) the game would need to introduce the mechanics in a way that allows for the child to easily know what they need to do and how to play. | The team decided to create an audio tutorial to describe how player 2 can play. As the Covid-19 lockdown had just started, we were unable to use the services provided by the university, so decided to simply record the audio from home. While the quality would not be as good, the game was to be a simple prototype/proof of concept, so audio quality was not of utmost importance. As player 1 would be controlled by an older player, the team decided that to teach them how to control their character, there would be signposts in the background of level 1 which would display a button and a black and white diagram showing their character performing what the button does. This was chosen, as the team prefers for games to teach by show, rather than tell (signposts were not used for player 2’s tutorials, as they may not know what the signs actually mean). |
| Covid-19. As the lockdown had started, the university was to be closed for the foreseeable future. | The team decided to have meetings twice a week over discord. This allowed for easy voice chat and file sharing, and made it easy to discuss issues that we had. |
| Voice acting. Due to none of the team having any voice acting experience, we needed to decide on who should do the voices for the game. | After much discussion, the team decided that Sam would voice the narrator, with an associate of his voicing player 2. The audio was then modified in audacity to better fit the game. |
| Game name. The team had not decided on a name for the game or its characters yet, which (for a videogame) was quite an important feature to leave out. | The team decided (after much discussion), that player 1’s character would be called Cardinal, while player 2’s character (The wizard squirrel), would be called Prentice, due to the squirrel being an apprentice wizard. The team also decided that the game would be called “Cardinal and Prentice: In the Nick of Time”. |
| Extra game features. Once the base controls had been created, the team realised that the game still didn't feel “Game-y” enough, and realised we should add a few more features to the game. | One of the key points that the team discussed was the overall sluggishness and lack of objective in the game. To fix this, we decided to give Cardinal (Player 1) a run button. This would allow him to move through the stage a lot faster and allowed for greater gameplay flow. We also decided to implement collectable coins into the game. This was to make sure that player 1 couldn't run through the entire level without actually playing the game. Lastly, we also decided to give Prentice’s (player 2) green projectile the ability to spawn a damaging cactus upon hitting a surface.The team felt like player 2 and player 1 did not interact enough, so and adding this feature allowed for player 2 to create obstructions to help or hinder player 1’s progression and change how player 1 plays. |
| Game control feedback. After receiving feedback from the client, the team discussed the feedback he gave and decided that some changes needed to be made to achieve client satisfaction and to improve overall game feel. | To improve game feel, player 1’s weapon’s size was increased. This was to make it easier to attack and parry enemies. We also decided to increase the speed and distance of the player’s roll. Before, it was realistic, not having much distance and being relatively slow. This made it quite difficult to use, so we increased the speed and distance to allow the player to roll through enemies and their projectiles much easier. |