**Executive Summary**

This is Team Team’s progress report for the work on ‘Kasaya’, a gravity puzzle based platforming game with some reading elements. The game is currently planned to be for the Windows and Mac operating systems only. It will be made in the game engine Unity, using the Tuizi API. The graphics are developed in Adobe Photoshop CS5 and Painter SAI. Music is to be written in Fruity Loops and Garage Band.

The game itself is exactly what it sounds like- playing as the main character, a Kasaya from a tribe on a small, unknown island in the sea must go on an adventure to rescue his fellow, captured tribesmen. The Kasaya will have to undergo a variety of levels and trials in order to reach the hideout of the kidnappers. Throughout all this, he has one special ability to use- gravity shifting. He can change his gravity on moment’s notice, and while he cannot jump, this power will grant him all the mobility he will need for the entirety of the game. Gravity shifting will allow him to reach places he couldn’t before, and to proceed to ‘goal’ areas through which he can eventually be reunited with his loved ones.

This progress report is going to cover detailed elements of the game. It will go through a clear description of the main character, and a bit of backstory on his life in the Kasaya village, as well as what happens to him during the course of the game. Besides him, there will also be villains- the gorilla cola employees and their minions. At current, there will be three different types of enemies placed enemies on the levels. Within the gameplay, there will be five levels that the Kasaya travels to. These stages will all vary in obstacles, ranging from spikes to locked doors. Keys will be present throughout the level, to be collected in order to proceed. Each gameplay stage will feature a variety of different graphics and backdrops, as the Kasaya will be going from the island all the way to the Cola hideout in the city.

Besides the puzzle gameplay, the game will feature ‘plot progression scenes’, which are visual novel-esque in nature. These comedic scenes will appear over the levels when important plot related dialogue is shown, to help the keep the player interested in what is going on as they progress. This won’t be a pure platformer or puzzle game- the plot will play an important part too.

Players will use a set of keys (w, a, s, d) to change the gravity of their own character and another set of controls to change enemy gravity. This will ensure that the player makes their choices for gravity shift carefully- otherwise enemies may reach and eliminate him. The game will feature a one-hit KO type of system for enemy damage- if he touches any enemy, he will ‘die’ and have to retry the level again from a designated checkpoint.

Optional systems later may include more complex items (that change the Kasaya’s gravity or other abilities), upgrades (such as increasing his damage tolerance), and a reward system for collecting bonus items (such as coins).

After the game design, the report will cover the current progress made in the game. At the time, the method for creating enemies and plot scenes is being worked on, as well as level construction. A timeline will be covered as well, featuring what the work plan for the rest of the project will be. This will allow Team Team to complete a polished game for the presentation.

**Game Design**

**Development Status**

At the time of writing this progress report, several features have already been implemented, serving as the foundation for the rest of the project that is to come. We felt that it was most important to cover the basics first, as all the features after it will build upon these simple things. Besides that, the level construction, which may be one of the bigger aspects of the game (as a platforming game is all about the levels) has also been started, since that is expected to be the most time consuming, with the way that Unity tile construction works.

For now, the most basic level of gravity shifting has been completed. This includes allowing the Kasaya character free mobility, and lets him float around as he pleases, using gravity shift as his ‘wings’. This also covers for his lack of jumping ability, which is normally a critical feature of platforming games. With that is currently complete, there is now plans to add more complexity to the gravity aspect of the game, since the time aspect was scrapped after the proposal.

The plan now is to use the mouse to affect the gravity of enemies nearby, adding force depending on the mouse drag, which was covered in the game design section. That is to be added. This will, of course, be hard to implement, as giving the user control of the mouse on enemies will require a lot of restrictions and accurate programming to work. Since this system will be so open, there is great potential for a lot of bugs to be found. A lot of testing will be necessary for this. If it doesn’t work out, the fallback will be either to have the enemies change gravity together with the kasaya, which would change a lot of things, or scrap the secondary gravity altogether. This will be done before the detailed level construction happens, as what happens will change how levels work greatly.

Graphic wise, tiles are being worked on for each level. It is expected that there will be one tile for the platforms, separate tiles for the obstacles, and a repeatable tile for the background. This is all in development, though a draft copy has been finished for the first stage. (Draft copy meaning that further details will probably be added at a later time.)

Also in terms of graphics, the main menu still has to be done, as well as the interface for the plot development (and actually implementing it into the game). Still, as those things can just be edited from a base, the ‘template’ will be first to be added. The main menu will feature simple GUI, allowing players to access the tutorial/instructional, and the game itself. The art for that also needs to be done.

The tutorial level itself has already been completed. Other levels, however, are still in development, and a lot of time will be spent there, making sure that each level has puzzles that will take advantage of the setting that they take place in. For example, the levels in the jungle level will be different than the ones in the city level. Difficulty also needs to be factored in.

This aspect of the game will probably be one of the most difficult implementations to make, despite having a template to work from already. This is because coming up with clever puzzles that will challenge (and yet, not frustrate the player) will take a lot of testing and planning. To ensure playability and quality, testers will be asked to try the game as new levels are made, to make sure that they are still fun. As a fallback, however, if very complex levels don’t work, simpler levels will be used. It depends on how testing goes- whether the game will be more fun easier or harder.

The camera has been adjusted since the demo was made, to give the players a greater scope of the level so they can plan their actions better. This will be especially important once the enemy gravity shift is added, since players will need to plan how to move enemies in advance in order to make it to the end of harder levels.

Furthermore, items (specifically, keys) are going to be added in a later development. The level obstacles are also quite simple right now, but as mentioned earlier, with the level planning, more will be added based on the setting of the level. Currently, there is plans to implement locked doors, spikes, falling objects, pit traps (unable to escape), and enemy ambushes.

And of course, enemies will be added! At this time, three different types of enemies are planned to be added- different in size, appearance, and ability. Different enemies may have different movement patterns, but all will have the same purpose- to eliminate the Kasaya.

**Milestones to Completion**

**-keys**

**-spikes**

**-five original levels from proposal**

**-visual novel scenes**

**-enemies**

**-human head, gorilla <- medium**

**-death animation**

**-rotation animation**