*A survey of the games that you studied (3-4 pages of discussion about the games that you have played)*

Our group played a variety of mobile games involving cars and bikes..Our main goal was to play all sorts of popular endless runners we could find to understand their game logic, but as we finalized the idea of the player driving a car (later a bike), we were instructed to play all sorts of games that included a bike or a car to better understand vehicle mechanics and aesthetics.

Therefore, the types of general games we played before the idea was finalized were all endless runners. The types of vehicle games we played later comprised stunt games, traffic games, racing games and drifting games.

From the general endless runners, we found many flaws that can guide us better in the design of our game. The flaws included but were not limited to, the game controls not ‘feeling’ right, the game graphics and visuals being too simple, interactions with the game not being aesthetic enough, game difficulty not being challenging enough, the game not providing enough freedom or variety of options to the user. In Pako Highway, the player’s car was controlled by fingers which was not to the taste of the tester. Dunk Shot was a very simple game and is unlikely to fascinate the average user, due to user interactions with the game being very bland. Race Master 3D was an example of what not to do when setting the difficulty, as the user can catch up to the competitors easily even after multiple crashes of his car. We found that generally, games

We also found some highly appreciable features in the games that can be used as a guideline for a good experience: a self-explanatory UI, variety of choice, good game economy system and aesthetic ‘feel’ of the game.

The UI should not be confusing to the user, but rather be easily understandable so that the user can navigate the game. For more complex games, a tutorial may be provided at the start of the game, but it should feel like a fun interactive tutorial or demo and not a lecture displaying text to the user. We will have to experiment with different effects and design options to see which combination gives the best ‘feeling’ at the end.

Secondly, the game should not feel monotonous to the user. Different users will experience the same game differently, but to cater to the vast majority of them, at least the broad modes of playing should be covered in a game. This need not be true for all game genres, but it is definitely true for any racing game.

This does not mean, however, that simply adding different game modes and variety will improve the attractiveness of the game. In some extreme cases, this may even make the game feel too clogged. Dr Driving’s variety of options was balanced, but Real Racing 3 was extremely annoying as tutorials and different menus for customizing the ride kept popping up. A lot of time was spent navigating through the starting menus, trying to minimize customization of my car since all that I wanted was a quick, fun time. Thus, an overflow of variety led to a hindrance in my fun game experience.

At the end, the ultimate decider of what makes the game pull the user is the aesthetic. This is a highly subjective and thus tricky factor to decide, since it varies from person to person. In the general games we played, some ridiculously simple games (removing paint from floor in Spiral Craft 3D) were extremely aesthetic in their basic game idea. As the paint is peeled off from the floor, the visuals and sound effects combine very effectively to make it satisfying. Though one member of the team found this combination stimulating, it is not necessary that others will do too. This goes to show how complex the aesthetic part is. The key is then to introspect, trust your team’s instincts and let the best combination happen.

In all the games we tested, the game economy seemed to be a motivating factor to keep playing the game, especially the endless games. For instance, in the ‘Traffic Racer’ game, the user gets some points when his/her car overtakes some other car on close calls. After gaining certain coins, the user gets the opportunity to buy a new car. This economy system in the game motivates users to gain as many coins as possible and then upgrade their vehicles or unlock a new game mode which is even more challenging and pleasing to play. Another bike game ‘Traffic Rider’ also uses the same concept of getting coins on close calls. The coins should be of a suitable difficulty to collect, so that it is neither very easy nor very difficult to buy upgrades or new features. A fine balance will regulate the user’s motivation levels.

After testing the general endless runners, we moved on to games with vehicles. From racing games, such as ‘Racing Master’, and traffic games, such as ‘Rush Hour’ to stunt games, such as ‘Impossible Car Stunt’, we experienced many good and bad things while playing these games. For instance, in Racing Master, unlike many other games, the car respawns after a single crash. This is good because sometimes it becomes boring and even frustrating for some users to start all over again after hitting once, especially in endless racing games. They want one chance especially when they have covered miles of distance. This helps keep them playing the game and continue surpassing the challenges.

Secondly, the vehicle movement, either the tilt or button/touch control, was the thing that we all were confused about. Half of the members were more inclined towards tilt control and the other half were thinking about having button control. We played many games to test this feature and that which control gives a good experience to the user. Firstly, we observed that moving the vehicle with fingers is not so friendly and playing without involving fingers is more user-friendly. On the other hand, the tilt control in some games was making the vehicle out of control. For example, in ‘Highway Rider’, as we tried to move the bike left or right, the bike was getting out of control. But then we played more games, such as ‘Traffic Racer’ and ‘Traffic Rider’ where the tilt control was perfectly fine – due to an appropriate limit on maximum sideways movement speed possible – and made these games easier and more convenient to play as compared to the buttons control. And that led us to prefer tilt over buttons to implement in our game.

The most important thing in game design and development is making games fun and challenging at the same time. The user should not feel bored at any time while playing the game and this is the thing that we observed in most of the games. In some of the games, over speeding was used as the challenging factor while in others, obstacles were used as the challenging factor. For example, in the ‘Racing Master’ game, obstacles were used at different points to make the game more fun and challenging. However, these obstacles were not that much difficult to surpass, and the car could easily pass between these obstacles. They could be made more challenging. We aim to introduce a variety of obstacles – starting from easy and making them difficult with time so the user doesn’t really get bored at any time.

Providing users, the opportunity to select between different bikes/cars is also another thing that can increase the motivation of the player to keep playing the game, collecting more and more coins, and thus unlocking those new cars/bikes, and new game modes which make the game even more interesting and pleasing. In most of the traffic or racing games that we played, users could choose between a variety of vehicles and game modes and thus this is the functionality that we can’t ignore in our game as well.

Overall, playing different games gave us different possibilities that we can introduce or improvise in our game and helped us finalize our idea and features that we want to implement in our game. We realized the importance of UX design, aesthetics, adding challenges and an economic system in the game. We experienced and observed a lot of things while playing a variety of games and we are hopeful to mix and match features of those games into a completely new game that will be unique, and at the same time fun and challenging to play as well.