River Kelly
CSCI-445: Human-Computer Interaction
Case Study #4: Gamify Your Life
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Gamify Mobile App

As a serious game mobile app developer, the application that I would design, rather re-design, using gamification would be the Big Sky mobile app. Big Sky is the largest ski resort in North America and guests travel from all over the world to enjoy the mountainous terrain and hit the slopes. Although skiing is mostly done for enjoyment, competition between peers is very common. Very often I find myself challenging my friends to see who is the faster skier, or who can ski the harder run. Some of the commonly asked questions skiers get are; How many runs did you take? Where did you ski today? What was the best run of the day? With a gamified Big Sky app, all of these questions could be answered and help create a fun competitive environment at the same time.

Imagine pulling up to the ski mountain, and opening the Big Sky app to find an interactive trail map of the runs. The app would track the user's location and show them exactly where on the map they are currently located. By tracking the user's location, the app would also document and record the ski runs taken throughout the day. The app would also record measurements like max speed and total elevation change. And of course, the app would record the total number of days skied. By recording the users' interactive metrics while on the mountain, the playing field for the competition is beginning to be created.

By sharing each user's data with the server, the app would be able to provide leaderboards comparing each user on the app. There would be a leaderboard for who has skied the most days this year, who has had the greatest elevation change, who has taken the most runs this year, etc. But these are all basic measurements, we want to separate the beginners from the masters. The app would also rank each user with a certain status. At the beginning of each season, everyone would start out as a beginner and work their way up the ranks. The most basic way for users to improve their rank would be by simply hitting the slopes. The more runs you take or the days that you ski will improve your rank. But there will be other ways to improve your rank. Daily goals will be available for users to accomplish. For example, one day there could be a badge called "Cliff Master". To acquire this badge, a skier would have to ski a certain run. Or there would be a badge called "Mogul Slayer", where a skier would have to ski 10 black diamond runs in one day. Earning these badges would also help improve a user's ranking and the badges would also be displayed on the user's profile.

This style of gamification would allow the users autonomy by giving them the choice over actions. Although certain runs would be worth more points, the user would be able to choose which runs they want to ski for the day, or which badge challenges they wish to complete. The choice over a user's actions also allows the user to score points and interact with

the game based on their own personal competence. Not everyone who goes skiing is able to ski the hardest runs on the mountain. But kids who go for a one-week vacation each year still want to compete with their friends. This brings us to the relatedness of the app. By allowing users to share their scores, they are creating a community by connecting with other skiers on the mountain.

Application Flow

The goal for each user will be different depending on the level of skier each user is, but the goal will still be somewhat the same. For the better skiers on the mountain, their goal might be to become the best overall skier on the mountain. Working hard all year, every weekend to earn as many points as possible, so that at end of the year their name appears at the top of the overall leaderboards. For skiers that are new and still learning the sport, their goal may be to be better than their friends, brother or sister, or even parents. As a kid, I would have loved a concrete way of telling my brother that I am better than he is. But the clear goal for each of these users, whether it is to improve a little or a lot, is to become a better skier and enhance their experience while on the slopes.

As a lifelong skier, I know what it feels like to improve my abilities. When skiing moguls, skiing them faster while in control shows my personal improvement. But having an app that documents the number of runs, top speed, run difficulty, etc. Then the progress towards improvement is clear. A user simply has to open up the app, watch their personal stats improve, and see the progress they are making. But personal stats is not the only way that users will be given feedback.

The app will be capable of various notification methods. For example, if a user reaches a new top speed, a push notification will be sent to the user's devices telling them that they have a new personal record. Certain summary notifications will be sent to users at the end of the day letting them know what improvements they've made, or how they increased their rank on the leaderboards. For the weekend warriors, a push notification would be sent if let say their friend earned a new badge or passed them on the leaderboard rankings.

Fogg Behavior Model

The two key components that the Fogg Behavior Model takes into account are motivation and ability. The gamified Big Sky app is designed to entail both of these concepts. The app is motivating because it allows its users to speak about their skiing experience at a greater deal and the ability, or ease of use, is low because the user is given a variety of options to pursue based on their competency and ability.

Each time my roommate comes home from an epic day of skiing, he tells me about all of the sweet runs and highly memorable events that happened throughout the day. Likewise, when a tourist goes on a trip skiing, they return home with stories about their experience. The app

motivates each user because this experience is enhanced. Now, the user can show exactly what they did and what they accomplished. The user can talk about the new ski runs they discovered or the adventure they went on to collect one of the app's many badges.

The ease of use or the ability to use the app is very low. In fact, all the user has to do is download the app, and go skiing. There is no need for the user to manually enter their accomplishments. The app will automatically track the user's activity and reward them accordingly.

Intrinsic and Extrinsic Motivational Factors

The app is designed to provide the user with both intrinsic and extrinsic rewards. When a user of the app goes skiing, they can track their progress and watch themselves progress. There is an intrinsic motivation to watch your own profile grow. When a skier skis a new run, the app will document this, showing them that they have been somewhere new. The implementation of badges is also intrinsically valuable. By showcasing a user's badges on their profile, the user will gain a sense of satisfaction.

The extrinsic motivation is the status that a user gains in the community by revealing their rank amongst the group. It is always good to be humble, but when it comes to skiing there is a certain level of vanity at play. When a skier does something new or cool, they want their friends to notice. The external reward would be showing to their friends the new badges they acquired or their overall rank on the leaderboards.