Freestyle Skiing Skills Tracker

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Project Plan

Revised Description

Professional freestyle skiing is a goal oriented sport, where skiers are constantly trying to improve their skills. Sadly for most freestyle skiers, reaching that goal depends on encouragement from friends or personal tracking systems. Sometimes, these encouragements are not enough for these athletes to reach land the next trick. The previous proposal described a device that can be installed into a pair of goggles that would keep track of the tricks (e.g. backflip, cork 720, etc) one successfully lands. Upon completion of each trick, the user would see a number of points pop up on their goggles. These scores would then be saved along with the trick that was done. The scores could then be uploaded to a website or app that displays the users best scores at each mountain. This is proposed to create more competition and incentive for skiers to progress in the sport.

We plan to take this base idea and expand on it. Instead of a wearable device, we will create an app that allows skiers to track their progress on the mountain. A user would be able to upload attempts of certain tricks to track their progressions. A user would be able to socialize in the app with other skiers, either in the world or at a resort they are currently at, to compare similar maneuvers or tricks and watch other skiers progressions. Athletes of any skill level, age, and location will be able to track their progress doing certain tasks on the mountain, from pizza's to french fries to double backflips.

Skiing is already an very social sport. Very few people tend to go skiing themselves, instead in groups. Thus our app's goal will be to improve and track individual skiers skills, but also create a social network of resort goers to encourage one

another to enhance their skills. We believe that these group dynamics are something that we can tap into; Enhancing the sociability of skiing, while also pushing the limits of skiers of all skill levels

Group Dynamics

Meeting Schedule
Before or after lecture on Tuesday or Thursday

Main line of communication
GroupMe, iMessage group chat

Documentation & Storage
Google Drive / Docs
Github

Research Plan

Data Collection Method: Mountain Observation

The first data collection method we conduct will be an observation of skiers and snowboarders at different ski resorts in Colorado. We concluded that the Arapahoe Basin and Loveland Pass ski areas would be great locations to be able to observe a wide range of skiers at various skill levels. Our observation is key in understanding the general behavior of skiers and how they use mobile phones while skiing. The observation will be vital in properly building a progressive website which will meet skiers needs and interests.

There are several key activities which we will focus on observing. We will observe from multiple places on each mountain, such as the top of runs, the freestyle park, and on ski lifts with other skiers. First, we will get an idea of how people generally use the ski parks. This includes which areas are most popular and how they use these areas. This will help analyze specifically which areas of the park are most popular. We

must also understand the users of the park. Are there more skiers or snowboarders? What tasks does a skier at each skill level have to complete to try progressing their skiing skill? What kinds of tricks are they landing? By going to these different ski resorts, we will be able to observe which types of parks are most popular and assess the qualities which make skiers return to them.

By understanding the user group of parks, we will be better suited in designing a piece of software which will help them reach their goals and become better park skiing enthusiasts. For example, if users of parks are generally fearless and hard nosed, then we must design our software's visual design with these people in mind. For example, if we notice that there is one particular ski trick or skill being attempted frequently by skiers, then we might add a feature to our application that gives extensives tips on how to complete the trick or skill.

The most important of our observations will be to understand how skiers use technology while on the mountain. If we notice a trend that people are using certain apps, specifically apps in our genre, on the mountain, then we must interview skiers to discover which qualities make these apps unique and why they are returning to use it. However, If we cannot find anyone using technology (which we have probable cause to believe otherwise), then we must create opportunities through our app for an experience that many people are not using. This will help us understand how we can make our app unique and have the ability to be used by park skiers and add qualities which will increase the likelihood that people will actively use our website or application.

Possible Questionnaire:
1. Are there differences in interactions between skiers and snowboarders?
2. What tasks does a skier at each skill level have to complete to try progressing their skiing skill?
3. Is there a trend in kinds of tricks/maneuvers that skiers are trying to complete?
4. Which groups/individuals require the most assistance when progressing their skiing abilities? How does each group gain assistance?
5. How prominent is technology in the routine of a skier? When do skiers use technology most often?

Data Collection Method: Interviews of Frequent Skiers

The second data collection method we would like to conduct is an interview of skiers. We believe it's not only important to observe the skiers but also understand what their goals and methods for bettering their abilities are when out on the slopes. By understanding their methods, we will better understand how we can develop our software to assist skiers the most. There are a few areas of focus that we would like to focus on when interviewing the skiers.

We would firstly question selected skiers about their confidence levels when their skiing the park. Our goal is to understand if skiers feel comfortable, courageous, anxious, etc so that we can get a better idea of how to assist skiers more efficiently and powerfully. Secondly, we want to ask skiers specifically websites/apps they use to advance their abilities. By documenting similar websites/apps that the skiers use, we could get insights and ideas of our own. Lastly, we want document specific ways in which skiers motivate themselves. Completing specific maneuvers or tricks requires a large amount of courage and motivation both from themselves and their peers. By understanding how various skiers go about this task, we will have data that will allow us to make the best and most helpful application/website that we can.

It's very important that we complete interviews with a wide range of skiers so that we can get a full glimpse of various perspectives that exist in skiing. Our target group will be avid skiers. This group is deeply ingrained in the sport and connect with it off the mountain. They will give us the best understanding of what skiers value, and be applicable to a wide demographic. With many friends who are avid skiers of different skill levels, we don't think recruitment will be too strenuous.

Sample Interview Questionnaire:
1) How long have you been skiing for? Are you comfortable on the mountain?
2) Do you use mobile apps to help with skiing or to progress with your goals?
   - If so, how do these apps impact you and what makes you come back?
   - If not, what qualities would an app need in order to interest you?
3) What helps you stay motivated to work towards your goals on the mountain?
4) What was the hardest ski trick you've learned and what resources did you use to gain confidence?

5) Have there been times when you questioned your ability as a skier? What methods did you use to overcome this?