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Project Proposal

1. Business description

I hope to develop a project to help people who like outdoor hiking to find the appropriate mountain or trail information. Hiking, also called hillwalking, is defined as a long and vigorous walk usually for exercise or pleasure. So, my project resides on the field of outdoor entertainment and recreation.

The purpose of project is providing personal hiking route or plan in Adirondack region (e.g. direction, weather condition) based on different condition or requirement.

2. Problem statement

Most hiking resource in Adirondack Mountains can be found on official website. By searching online, you can find the locations of the trail and related hiking map (e.g. Department of Environmental Conservation). However, hiking is highly influenced by other conditions, which are managed separately or not existed so far. Followings are necessary information needed for a wonderful hiking journey in mountains.

(1) Weather

Weather condition is very important factor to hike. Nobody likes hiking under rainstorm. It is very dangerous. Most of hiking trails are far from residence block, so it usually takes more than two driving hours. Knowing the weather condition at trail location before you set off can save time and gas money. Current way is searching hiking location first, then the weather according to the first step.

(2) Camping

You can plan one-day or multiple-day hiking. Multiple-day hiking in mountains needs camping site, equipment and food stored in bear-resistant food container. Right now the camping ground information is managed by other system.

(3) Hiker’s physical condition or professional level

Every hiking journey is like opening a new book. You never know how steeper the peak will be or how many hour it will cost you until you reach the end page. Even though many hikers post their route and hours on Facebook, but that cannot exactly predict yours. For a 28 miles trail, some people may spend less than 8 hours, or more than 14 hours. It all depends on hiker’s physical condition and professional ability. If the planned route is overloaded, issues of short food supply and dangerous walking under dark are big trouble. Knowing yourself is the height of wisdom, but it does not available so far.

(4) Safety issue

Wild animals inhabit North American wildness area, such as squirrels, chipmunks, pikas, mice, raccoons, goats, marmots, bears, even gray jays and deer. Hiker may see some birds or squirrels, but no one hope to meet bear on trial. It is dangerous situation for both hiker and bear. There is no systematic database to record the bear track for hiker.

3. Proposed solution

Currently, information of roadmap, weather and camping can be found separately. I am proposing to a new database containing them. Database of hiker’s physical condition or professional level and bear track are not available, so I plan to create them in the new database open to users. Those information are linked together to optimize the hiking experience, safe and efficiency. Entities include Trail, Camping, Weather, Hiker’s health and hiking record, and Safety alert.

Purpose of the proposed system is offering personalized hiking route. It may be free to users, but it is profitable by advertisement of outdoor food or hiking equipment companies. So the business functions of production, purchasing, marketing, development and accounting are considered. Human Resource Management may not be included, because the product is a digital map. There is no need of shipping and other human service.

4. Users

Users of the proposed system will include the Adirondack region organization, hiker, and outdoor food or hiking equipment company. They do not have equal access to the data.

Adirondack region organization has the access to publish the details of trail, such as trail mileage, hourly weather condition for each mountain, and camping location and availability. But they do not have right to access hiker’s privacy information, routes and review.

Hiker has the platform to search mountain, trail map, rank the trail, and write hiking review. But hiker cannot change the basic hiking information managed by Adirondack region organization.

Outdoor food or equipment companies cannot access to the data managed by Adirondack region organization, but they may be accessible to hiker’s basic information such as email address with their agreement.