

Software Project - bikebook.eu

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1 Short Annotation

This paper briefly describes the idea of a social networking system - bikebook.eu, meant to be implemented as a Software project (NPRG023).

2 Motivation

Social networking web sites are one of the most growing parts of the internet. They're being used regularly by millions of people. There's a lot of general networks, like facebook.com or myspace.com, but there aren't many networks focused on particular group of users. Cycling is one of the most popular sports, being actively practiced by a great many people worldwide.

Existing web sites about cycling are focused on one particular type of information e.g. cycling routes, component reviews, cycling events, etc. The idea of the bikebook.eu project is to integrate all these functionalities to one system, providing basic functions of a community server and a strong mechanism of connections between the system entities - bike riders, bikes, cycling events, routes, etc.

As far as we know, there's no social network like bikebook.eu.

3 Project Goals

The goal of the project is to create a real competitive community system. Bikebook.eu is meant to be a community server for bike riders of any age, performance and specialization.

The system is intended for various kinds of users. Active cyclists could be able to view trails located near their home or a place they're going for holiday. The system might work for them as a cycling diary with many special features. The cycling fans could be able to view and edit cycling star profiles. The system might show events the star will be attending, or star's results in competitions. The bike shop owners could be able to give information about their shops to the system. Bike riders then could be able to seek information about the shops. The cycling event organizers could be able to attract riders to their events, or communicate with other event organizers.

4 Main System Features

The system can contain several entities like a rider, a bike, a shop, etc. Each entity would hold information about the certain thing related to cycling, that we represent in the system.

Each entity can have its own profile containing information about the entity. These might be of two types: one type is a profile for a registered user (only the owner can edit this profile), the other one is for other entities, that don't belong to a particular registered user. These profiles would be edited in wiki-style (they would have a given structure, each part of the profile could be edited by registered users). The first type of profile would be created when a new user is registered into the system, the second one would be created and modified by registered users.

Users would be able to attach tags to each profile. Tag is a short textual information, describing the entity. Tags could be used for searching. There might be two types of tags - predefined tags and user tags (defined by the users).

Searching using tags isn't meant to be the only way how to search in the system. There might be a fulltext search as well, users could use it to find profiles containing certain information.

The system might offer recommendations to the users, containing information about actions, places, routes, riders near user's home.

The system could contain some typical community network features as well. Users might be able to use personal messages to communicate with each other, leave comments in guestbooks on other profiles. The system also might let them upload photos to their profile and show them to other users.

The system might have a map component, used for adding, searching and modifying of bike routes. Routes would be added to the map by users.

We think, the following parts of the system can be pretty challenging:

- Working with maps, adapting the map engine for working with routes.
- The database design. The system is pretty large, so the database can be pretty complex.
- Searching. The system users might search for profile pages using various criteria.

5 System Architecture

Bikebook.eu is a web application. The application is supposed to have a modular structure. Some third party components might be used. It will run on a Linux server.

The html pages generated by the application can be viewed in some of the most used contemporary web browsers (Firefox 3.0+, Internet Explorer 7.0+)

6 Development Team

The development team will consist of 4 - 5 people.

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