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<Revision History>

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| Version | Date | Description | Author |
| Inception Draft | 01/22/15 | First draft for Running Project by the Turing Eagles | Matt Kuhn |

<Introduction>

Our goal is to develop a web app that uses a MySQL database to store the race results of local races in the Cincinnati area to allow users to look up results of specific races or specific people.

<Positioning>

<Problem Statement>

Existing websites, such as milesplit.com, do not record the results of local races. Their website can be tricky to navigate, too. Other sites, like runningtime.net, have such records, but offer no easy way to navigate them. There does not currently exist a website that offers results of local races in a format that is easy to navigate and search.

<Product Position Statement>

We want to create a web app that hosts a database that stores race results from local races of the Cincinnati area, then displays query results to users who query that database. Our system is for anyone from the casual runner to the competitive runner. Anyone who might be interested in race results of themselves or someone they know who competed in a road race in the Cincinnati area. It could also service high school and collegiate coaches who are looking for yet-undiscovered, talented runners whom they may want to recruit to join their team.

<Stakeholder Descriptions>

<Market Demographics>

The running demographic isn’t limited to an age group or sex. This will be for anyone who is a runner themselves, or knows a runner, living in the Cincinnati area.

<Non-user Summary>

We will construct a server to host our database. We will also need a computer to host this server. For now, the best option is to just use a local server and use one of our own computers. The server will be hosted via the software WAMP, which uses a MySQL database. The database will store a few tables, the more important ones keeping the user credentials of those who have registered to use our web app, as well as other tables for storing the race results data. The schema has yet to be written. Other non users include the computers that the market demographic will be using to access out web app. There will be some functionality within the web app for some data analysis, such as race pace calculation, season pace calculation, and so on. These operations would need to be performed after database queries because storing calculated fields in databases is wasteful for storage space..

<User Summary>

We will need a database administrator to upkeep the back-end of our web-app. This is the only person who will be able to perform database operations on the race results tables. This person will also be able to remove accounts from the users tables.. We will need a web administrator to upkeep the front-end of our web-app for continued bug-fixing, updates, and other tasks for maintenance. Our user base will be those who create accounts on our app. There will be varying degrees of these users: the lowest level can view race results and are racers themselves. The next higher level can submit race results, and are race organizers.

<High Level Goal>

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| --- | --- | --- | --- |
| Feature | Priority | Means | Additional comments |
| Host server. | high | Utilize WAMPserver web development environment | Can be found here: http://www.wampserver.com/en/ |
| Put database on server. | high | use SQL DDL to create schema on WAMPserver. |  |
| Connect to server and perform operations on database as necessary. | high | Create a ServiceHandler class to make HTTPRequests to server. | Most likely use JDBC for this. |
| Update Race Results table | medium | Information to update database can be found from milesplit.com and runningtime.net |  |
| Have some form of use authentication and authorization to particular features. | high | Set up table in database for user-password matching system. | Use some form of encryption for storage. |
| Provide a simple interface for users to navigate and find desired race results | high | Create a user-friendly frontend. | Does anyone like HTML? |
| Have very quick responses from server to user on queries. | medium | Use stored procedures for some of these. |  |
| Allow for customizable queries for more in-depth race-result searches | medium | Allow users to search for particular values in queries |  |
| Allow users to submit race results for approval by DB Admin | medium | Users with this authorization can fill out a form somewhere in the web site where the data is sent to a table, perhaps called TEMP\_DATA. | The DB Admin can take the data from TEMP\_DATA and either delete it, or re-insert it to the main table with the rest of the race results data. |
| Allow users to see other user’s contact info. | medium | Users with this authorization will be able to view other users accounts. | The viewed user can choose to make their info private or public. Or even not have any contact info at all. |
| Perform race-based calculations for more in-depth results viewing/analysis | medium | Such as pace for particular race, average pace over several races, etc. |  |

<Cost and Pricing>

The cost of this project will be as expensive as the hours the development team put into designing and creating the web-app, as well as the time spent maintaining the backend and frontend of this web-app.

<Installation>

Anyone seeking to use this web-app will only need access to a computer with an internet connection and a web browser of some kind. Then, they will only need to navigate to our web site, and go through the user authentication process to access our web app.

<Others>

This web app probably will not feature much in the way of competitive races, as there is probably some sort of legal protection on the data for those race results. If we would like to look into extending our dataset into competitive races, then we should add the cost of a lawyer to our cost and pricing.