IST 659 Fall

Project Proposal: National Road Running Record Database

**Business Description**

The main idea of the project is to create a database for Shoe Companies to be able to determine the popularity of their sneakers for use in races and forecast resource allocation for growth or maintaining market competitiveness. The database contains a record of the names of runners, runner demographics, home locations, distance run, and type of race. This system will be helpful in the following ways:

It will help Shoe Companies determine top running athletes for potential sponsorship

It will be easier for the Shoe Companies to keep a track of their runners and their records

It will help Shoe Companies determine popularity of shoes by demographics, geography, race type and race length

Athletes will be able to look at their records and performances

Race Organizers will be able to determine feasibility of races by location and type and what resources will be needed

The Database that is to be created will contain records of the doctors employed, patients registered in the hospital, the details of the various departments and clinics, the medicine inventory.

It will ensure Data security

We have assumed the following:

All the medicines are always readily available and fully stocked at any clinical store

All the clinics have a Medical store in it

**Problem Statement**

All the records of the administration of a hospital are present in a physical form. These records prove to be extremely difficult to manage, maintain and access. As they are on-paper records, they are prone to wear and tear and eventually loss of valuable data. Furthermore, due to many records, space issues arise.

Physical records also restrict the doctor from effectively keeping track of their patients which may result in dire consequences for the patients. The Doctors also find it extremely difficult to keep track of the drugs prescribed to the patients.

This archaic system also makes it difficult for the patient to find availability in a hospital and find nearby clinics with a Doctor of their preference. Furthermore, the patients also find it difficult to look for the drug prescribed at a clinical store. They must personally go and look for the medicines which results in a waste of time. This results in a need for an effective and efficient Management system that can solve all the issues mentioned above.

**Proposed Solution**

With the ability to access this Race and Runners system, we will be able to see increased marketing competitiveness and runner performance as Shoe Companies utilize the system to provide better running shoes for their customers.

This system will help solve trial and error issues faced by the companies as it will make the data shoe companies utilize easier to store, maintain and access. It will reduce the timeframe of marketing decision making caused by having to pull data from a wide variety of locations and sources. The companies will be able to easily check and sort data by their individual brand and products and have the race results, client demographics and race conditions all in one place.

It will also help the runners access their race records and see which shoe brands and product types helped them perform better as well as which brands and product types worked better for certain races and conditions.

The shoe companies can query the system and find which fast paced and successful runners utilized their brands and products and reach out for sponsorships. Companies can also query the system by race and weather conditions and see where their brands fared better. This would allow the companies to be able to pick the best races to promote and how to better market their product for those race races and conditions. And the companies would be able to see where they need to make improvement both in product engineering and marketing.

**Users**

The primary end consumers of this product in this case would be shoe companies/manufacturers and other sports-based companies, organizations that host and/or promote such events including the IOC (promoter of the Olympics), sponsors, other runners which can include yourself. Users can view the database and utilize it to check running records to efficiently see times pertaining to different races based on a variety of conditions. Shoe manufacturers and runners themselves can see which shoe brands, types and distances resulted in what running times. Shoe companies will be able to efficiently go back years’ worth of data and check to see which races were most ‘successes for their brand and use that data to decide on what future races to promote, what shoe types to keep producing and who to sponsor.

**Potential Entities and Attributes**

RUNNERS

RUNNER ID

Name

Age

Weight

Height

Gender

Experience

Email id

Phone number

Shoe ID

SHOE CLASSIFICATION

Shoe ID

Shoe Brand

Shoe Cost

Shoe Type

Shoe Specs

Distance Run on Sneaker

RACE CLASSIFICATION

Race ID

Race Name

Road

Cross-country

Outdoor track

Indoor track

Weather

PRIZES

Runner ID

Lifetime prize money

Lifetime wins

Win streak

<https://www.kaggle.com/datasets/rojour/boston-results>

https://www.arrs.run/

<http://www.staterunningrecords.com/>

<https://www.gsrs.com/content/new-hampshire-state-age-group-records-other-information>

https://usatfmasters.org/records/