

# Preliminary Design : Black River Run Time Keeping

2018/12/12

Group 5





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# Introduction

- Each year, Västerås Running Club organizes a long-distance race called Black River Run in Västerås.
- To be able to track how people are doing without attending the race, Västerås Running Club has a website where information about the race is displayed.





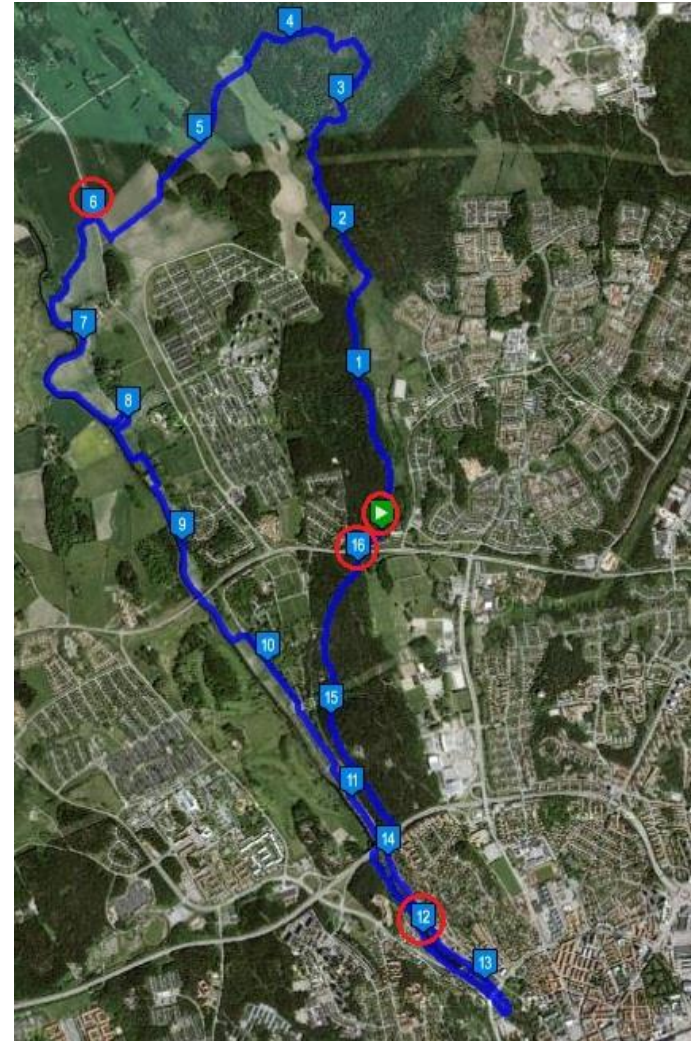
# Introduction

- The representative of the client is Christoffer Holmstedt from the Organisation Västerås Running Club.
- As the current website is outdated, the goal of this project is to create a new web application.



# Introduction

- Track of the race
- The stations are placed like this on the map
- Where the first station is the green arrow
- 16 is where the last station is located

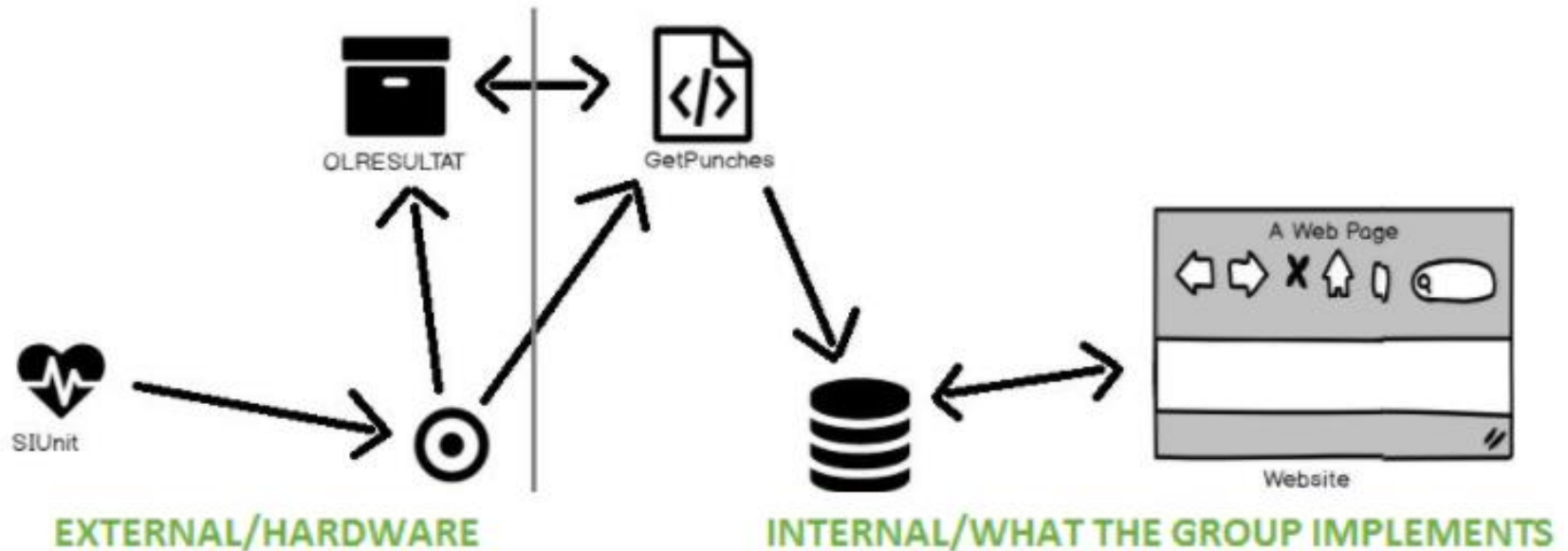




# System Design

- Overall high-level design :
  - Main parts.
  - Communication between them.
  - Communication with external systems.
- Design decisions :
  - Back-end.
  - Front-end.
- Third party framework.

# System Design Overview Of The System

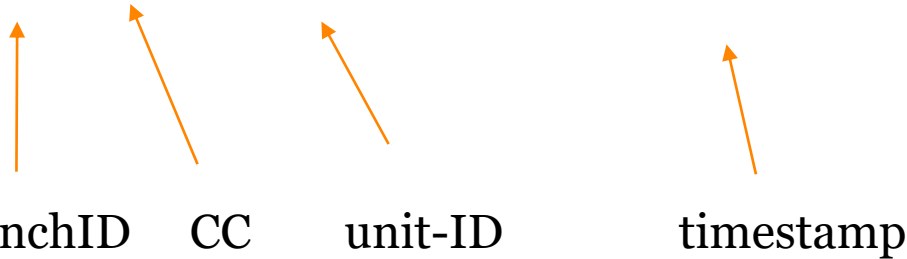






# System Design *GetPunches* script

- *310;90;2050766;2013-05-26 12:48:58*



- The individual data in the punches are separated by ';' and the punches are separated by a new line
- Calculations





# System Design Database

- The old database is unstructured and difficult to understand.
- Creating a new database.



# System Design - Front-End Design Decisions

- One unique interface page *index.php* :
  - Contains the main structure of the website (main menu, title, ...).
  - Includes body content by require other PHP pages according to the value of the GET attribute *page*.
  - Invokes all needed files (PHP, CSS, Javascript files).
- Multiple PHP files :
  - Contains all functions used in the website :
    - Accessing the database.
    - Manage the database (add, edit, remove).
    - Calculate different values (expected time, number of laps, ...).
- One CSS file.
- One Javascript file.



# System Design - Third Party Framework



Bootstrap



# Implemented Features

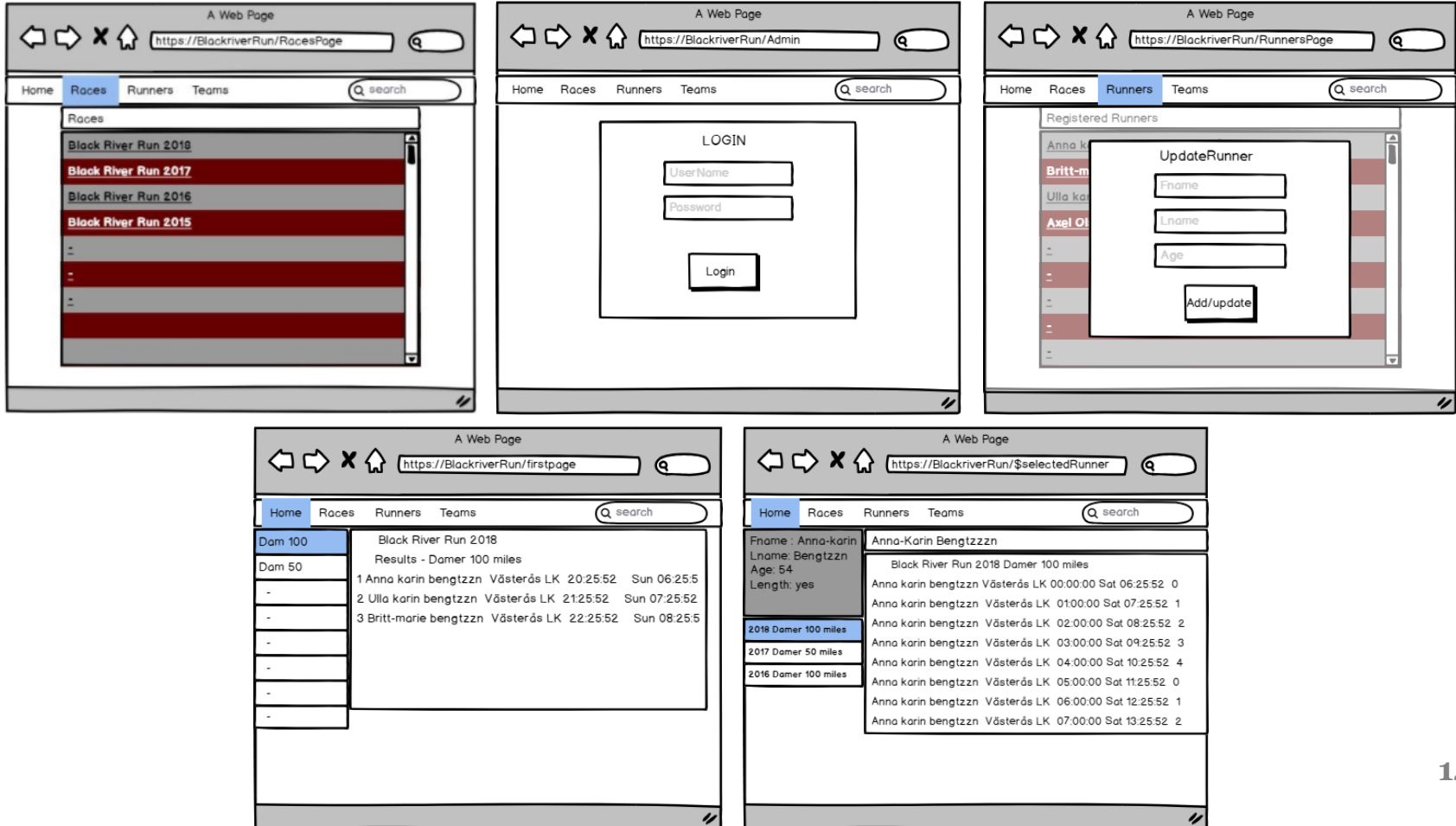
- Back-end :
  - Database.
  - Fetching *punches* from the Server.
- Front-end :
  - Global design.
  - Linked with the database.
  - Fully working interface :
    - Navigation.
    - Information display.
    - Search function.
    - Sort function.
    - Interaction on the database (add, edit, remove).
    - Administrator connection on the website.



# GUI Structure

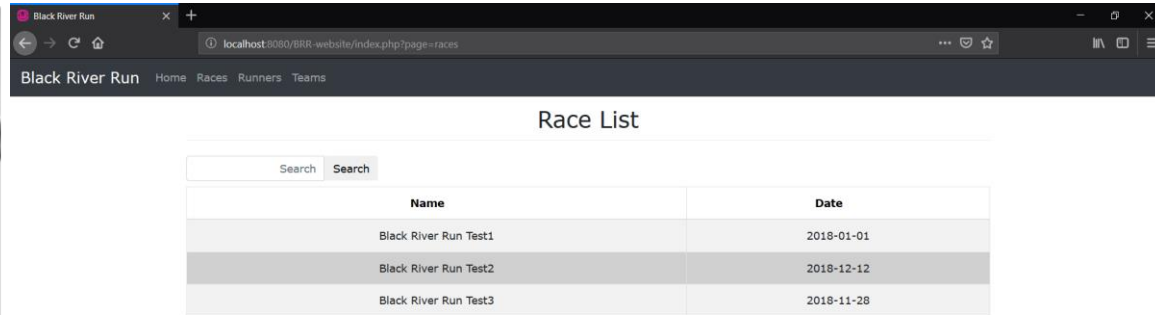
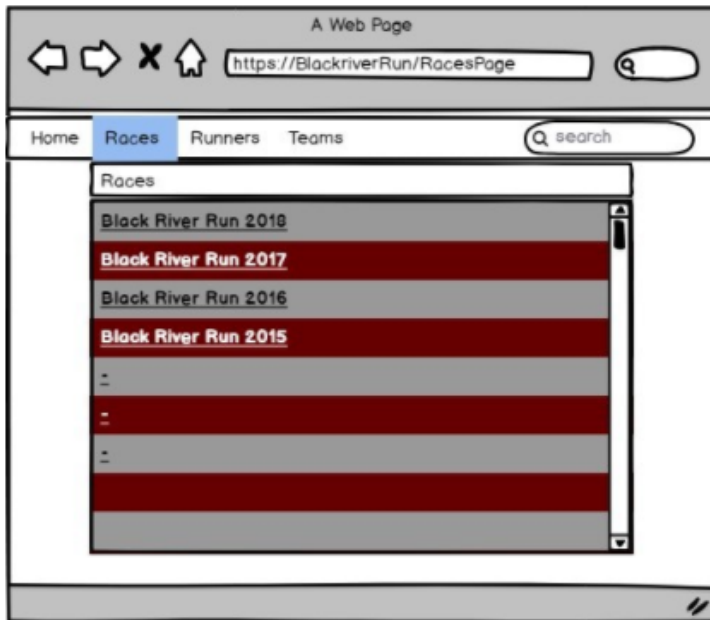
- Developed in PHP, HTML/CSS, JavaScript.
- Use Bootstrap.
- The GUI is divided in two different views :
  - Guest view.
  - Administrator view.
- GUI wireframe were done and used to get an overview of the final design.

# GUI Structure - Wireframes





# GUI Structure – Wireframe VS Implemented Interface







# GUI Design

- Common design choices :
  - Main menu and search bar at the top of the page.
  - Second menu on the left.
  - Standard colors for buttons and alerts.
  - Hover effect on clickable table line.

## Runner List

<div>Search Search</div>				
ID	Name	Date Of Birth	Gender	<div>+<div>...X</div></div>
1	Zacharias Claesson	1996-10-17	Man	<div>...X</div>
2	Test_W1 Last1	2000-01-01	Woman	<div>...X</div>
3	Seabass empty	1900-01-01	Man	<div>...X</div>
4	Rikard Gestlöf	1956-05-14	Man	<div>...X</div>
5	Test_W2 Last2	2000-01-01	Woman	<div>...X</div>
6	Test_M1 Last3	2000-01-01	Man	<div>...X</div>
7	Test_W3 Last4	2000-01-01	Woman	<div>...X</div>
13	Cécile Cayère	1996-11-23	Woman	<div>...X</div>
14	Bastien Delbouys	1997-02-28	Man	<div>...X</div>



# GUI Structure - Pages

- Global website structure is the same on each pages.
- Pages are divided in different categories depending on the data display or action possible :
  - Home page.
  - Login page.
  - Race pages.
  - Runner pages.
  - Team pages.
  - Dashboard pages.



# GUI Structure – Navigation And Interactions

- Navigation between pages is done by the top menu.
- All users can search, sort, select a list of elements to get more details about it.
- All users can get more information about an element by clicking on its line (runner line in the runners list leads to the runner page).
- Administrator can interact with the database through the website by using + , ... , x buttons.



# GUI Overview – Individual Runner

Black River Run

Home Races Runners Teams

Zacharias Claesson

Man

1996-10-17

Black River Run Test1

Place : 1

Bib : 4

Team : Club Salamandre TOWN4

History

Other Races

Black River Run Test1

Results Man - 20 miles

Distance	Place	Elapsed Time	Behind	Date & Time
20	1	03:03:03	-	2018-01-01 14:03:03
15	1	02:00:00	-	2018-01-01 13:00:00
10	2	01:30:00	+00:10:00	2018-01-01 12:30:00
5	2	01:00:00	+00:25:00	2018-01-01 12:00:00
0	-	00:00:00	-	2018-01-01 11:00:00



# GUI Overview - Edit Race

Black River Run

localhost:8080/BRR-website/index.php?page=manage&race=39

70 %

Dashboard Logout

Home Races Runners Teams

Edit Race

Name :

Black River Run Test3

[Capture Photo](#)

Date :

28 / 11 / 2018

Cancel

Submit

Bib	Name	Team	Category	
1	Zacharias Claesson	Club Grenouille TOWN2	Man 20	X
5	Test_W1 Last1	Club Asticot TOWN2	Woman 20	X
4	Rikard Gestlöf	Club Salamandre TOWN4	Man 100	X

Runner

Category

Team

3 - Seabass empty

20

1 - Club Grenouille TOWN

Bib

Add

ID	Status	Holder	
5	Active	Zacharias Claesson	X

Runner

SI-Unit

1 - Zacharias Claesson

Add



# Client Feedback

- The overall status of the project is well advanced, some minor changes were needed.
- Colors on the UI should look more like the Västerås running club colors
- New requirements added :
  - Importing runner results from an Excel file.
  - Administrator can choose the race to display on the home page.
- Some wished features were formulated :
  - Dynamic map of the lap.
  - Information about the runner location in the track.
  - Language selection (Swedish, English, ...).



# Future Work

- Data verification when fetching it.
- Mobile view, responsive webpage.
- Importing / Exporting results from Excel files.
- Home page design.
- Some additional features :
  - Track a runner on a map.
  - Multiple languages.





# Questions

