# Introduction to Software Engineering

## First Iteration - Trend It

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## **Draft Notebook Ideas**

#### Personas

Made three personas, each one with a case scenario and a user story associated: One persona was made for lazure utilization of the application (browsing and knowing what's happening around the world and which trends to follow), while the other two, for business purposes (management of trends and/or knowing what's trending with the intention of creating a new business).

## **Project**

In the project Trend It we did the index, home, login and register page, in accordance with the user stories defined before.

The index page works as a welcome to the webpage, which will redirect to login.html for login purposes, or in case the user doesn't have an account, to the register.html. With the login/register made, it will show the home page which will be used to show both tweets and statistics.

Because it's still a prototype, it's still too early to know if we will add more/remove some.

## Backlog

## **Architect Notebook**

# Software project management and comprehension tool Maven

## Web java-based application tool

Java Spring boot Java Spring Spring Initializr Spring Tools Thymeleaf

## Database

#### Requisites:

- Database oriented to lines
- Very high performance
- High availability
- Horizontal scalability
- Easy filter of content

#### MySql

Characteristics	Positive or Negative aspects
Oriented to column	Negative
Great understanding from the developers	Positive
Scale well if configured correctly	Positive/Negative
Vertical scalability	Negative
Very high availability	Positive

#### Cassandra

Characteristics	Positive or Negative aspects
Oriented to lines	Positive
distributed (Maybe overkill)	Positive
horizontal scalability	Positive
high performance and availability	Positive
developers of the group are less experienced with this tool	Negative

## MongoDB

Characteristics	Positive or Negative aspects
Document database	Positive/Negative
Vertical and horizontal scalability and high availability (with sharding and replica sets)	Positive
Great for transactional, search, analytics	Positive
Performance limitations can happen due to inadequate or inappropriate indexing strategies, or as a consequence of poor schema design patterns	Negative
The developers have some experience and understanding of mongodb	Positive/Negative

#### **Twitter Bot**

languages	Java	Python
Useful Sites	https://gist.github.com/d ueyfinster/2469810	https://realpython.com/t witter-bot-python-tweep y/
	https://medium.com/@S eloSlav/how-to-make-a- scary-russian-twitter-bot -with-java-b7b62768a3a c	https://auth0.com/blog/h ow-to-make-a-twitter-bo t-in-python-using-tweep y/

## **Defined Ideas**

Software project management and comprehension tool

Maven

## Web java-based application tool

Java Spring boot Java Spring Spring Initializr Spring Tools Thymeleaf

#### Database

MongoDB

#### **Twitter Bot**

Java

## Bibliography

https://www.w3schools.com/w3css/w3css\_templates.asp

https://www.mongodb.com/

https://cassandra.apache.org/\_/index.html

https://www.mysql.com