

# Federated Health Search Application

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# Briefing

The Federated Health Search Application will provide a secure and quick way for people of various different backgrounds to search scientific papers and resources on a wide range of medical topics. Users will be able to:

- Search for resource using healthfinder.gov, MedlinePlus and Bing
- Save resources they find into categories
- Share these resources or decide to keep them private
- Maintain a public profile

# Functional Requirements

- The user needs to be able to create and edit their profile and to login and logout of the system.
- The user needs to have access to all the provided APIs.
- Users will be able to search for particular condition/medicine/symptom/treatments.
- Users will be able to save resources they like into categories they create.
- Users will have the option to make the categories either private or public (private by default).

# Non-Functional Requirements

- Results need to be correct and delivered quickly.
- The design should be simple and intuitive.
- The system should ensure security of users' information.
- The system should not violate users' privacy preferences.
- The system must have a reliable support team.

# Types of users

- Hypochondriac
- Researchers
- Random visitors
- Students
- Parents of sick children
- Long-terminal
- Slightly ill people

# Personas



## John Smith Jr

John is the founder and owner of Grandpa John's Baguettes. He has a world wide spread business. He spends most of his time at his central office at Los Angeles, California, where he establishes business connections with businesses all around the world. He is also supervising the Grandpa John's stores all over the world.

John was diagnosed with cancer. He wants to find out more about the disease he has. He also wants to know what are the different cures and medicines for it. He wants to know what other people are reading about on the subject. He is mostly browsing the Internet on his short breaks at work, so he does not always have a lot of time. He wants to be able to save and categorize resources he finds useful.

# Personas

## Tamara Thomson



Tamara is 36 years old. She works as a receptionist at a hotel. She has good skills with computers and is comfortable using the web as a source of information.

Tamara has had awful headaches in the past couple of days. She wants to find out what might have caused them and how to cure herself. She wants to locate information from reliable sources. She wants the resources to be clear and understandable, because she is not familiar with medical terminology.

# Personas



## Ruari Fraser

Ruari is a 23-year old medical student at the University of Glasgow. He is on track to graduate with a First Class Degree. He has a dissertation he needs to finish and a number of assignments.

He needs a place to search for reliable data about certain types of diseases. He is also doing a summer research project with one of his lecturers, and he wants to be prepared on the topic. He wants to find and save information to read when he has the time.



# Use Case Scenarios

## Register for the application:

- The user is presented with a registration form, and is asked to fill it in (user name, email, password, etc.).
- If the registration is successful, the user is logged into the system, and redirected to the home page.
- If the registration is unsuccessful, he is asked to fill in the missing/wrong fields again.

## Log in to the application:

- The user is presented with a login form with fields for his username and password.
- If the process is successful, he is redirected to the home page
- If the process is unsuccessful, he is asked to re-enter his details

# Use Case Scenarios

Search for a particular condition/medicine/symptom:

- The user chooses the type of search he wants to conduct.
- The user enters keywords into the search engine.
- Results are displayed in descending order, with the most relevant pages coming at the top.

Adding a new Category:

- The user is asked to specify the name of the category he would like to create.
- He can also choose whether the category can be shared amongst other users, or not, by making it, respectively, public or private.

# Use Case Scenarios

Adding a new Page (option available after a search has been carried out):

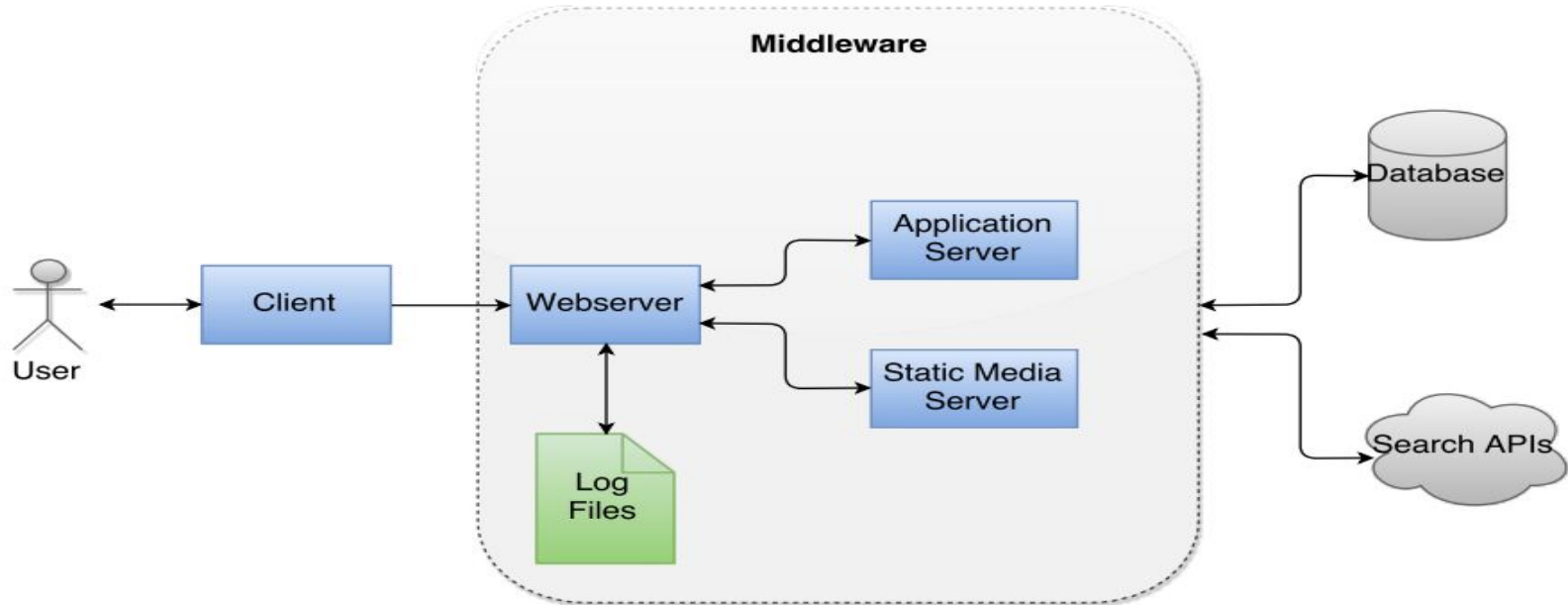
- The user is asked to provide the title of the page he would like to create (providing URL is not needed, as it comes from the Web Page he would like to add).
- The user can either add the page in an existing category, or create a new one to house the page.

Searching for an existing user:

- A username is entered into the search box.
- If the search is successful, the profile of the user is displayed with the last 5 categories he has shared.
- If the search is unsuccessful, a friendly error message is displayed.

# System Architecture

System Architecture -  
Federated Health Search App

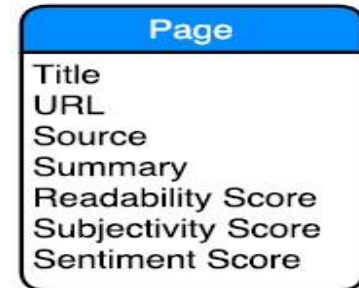
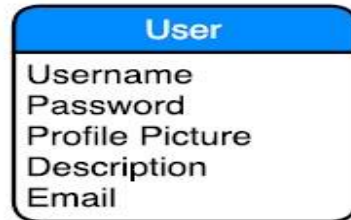


# ER Diagram

E/R Diagram

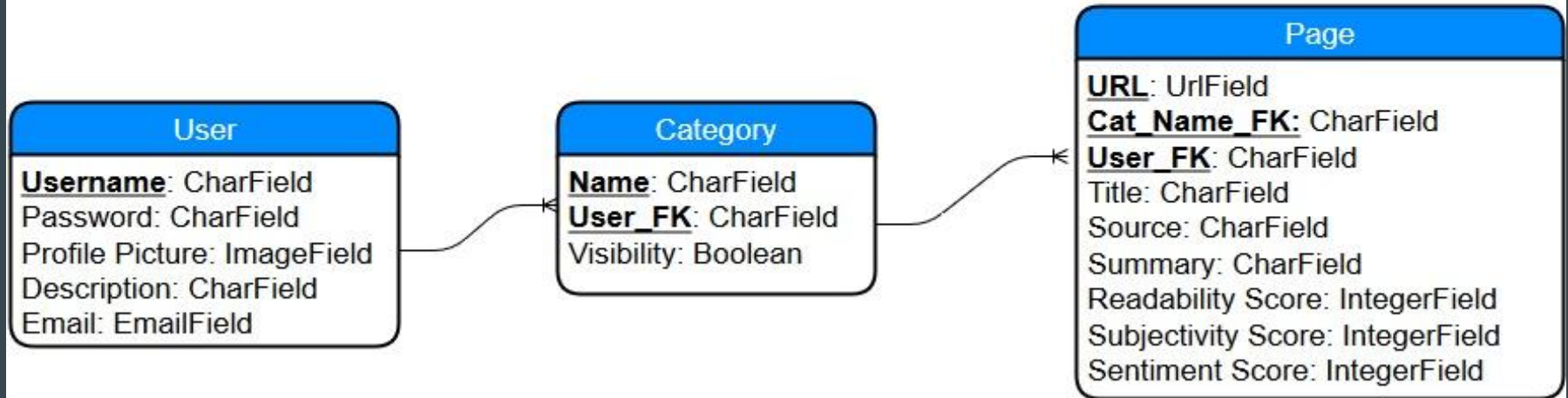


Attributes

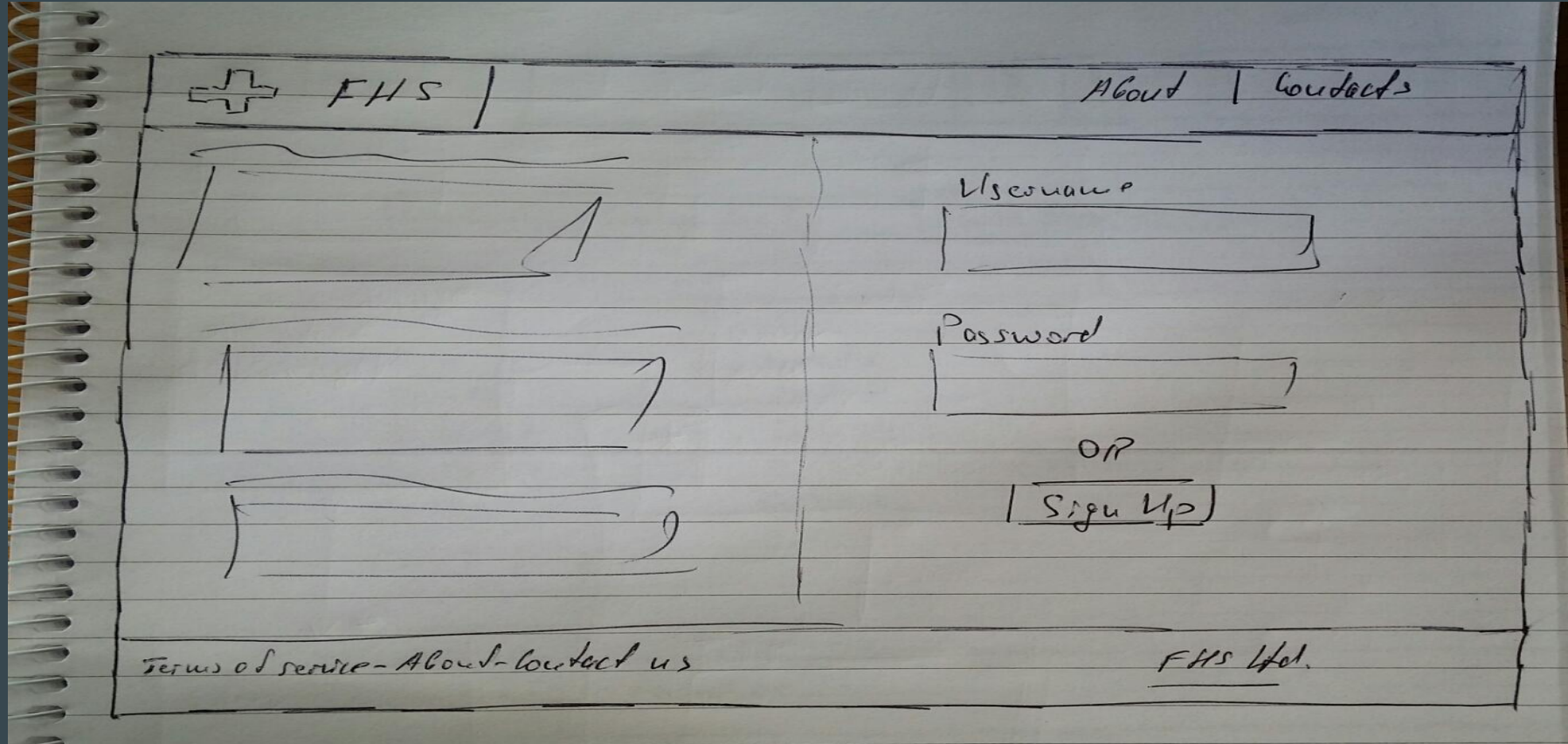


# Relational Schema

## Relational Schema



# Lo-fi Wireframes



# Lo-fi Wireframes

Settings menu

FHS

Username

What are you looking for?

Search anywhere

Age

- ☐ -18
- ☐ 18-37
- ☐ 37-59
- ☐ 60+

Gender

- ☐ Male
- ☐ Female
- ☐ Prefer not to disclose
- ☐ Other

Search

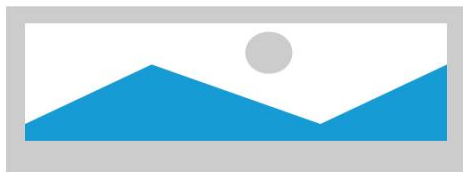
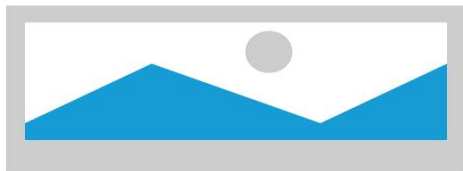
Terms of Service - About - Contact us

FHS Ltd,



# Wireframes - Index Page

+ FHS



Welcome to the  
Federated Health  
Search Application

Username:

Password:

Login

Not having an account, yet?

Sign Up

# Wireframes - Search Page



Tell me how you feel...

 ▾

Age group:

- ☐ 0-18
- ☐ 18-40
- ☐ 40-65
- ☐ 65+

Gender:

- ☐ Male
- ☐ Female
- ☐ Prefer not to specify

# Wireframes - Profile

[My Profile](#)

@username

## My categories

Public:

<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>

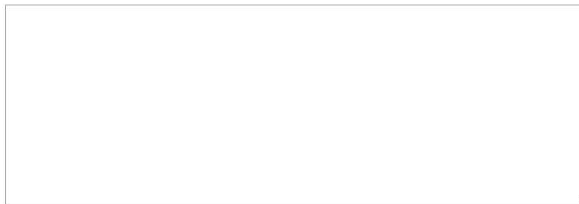
[Logout](#) [About](#)

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# Wireframes - Profile (outside view)

[My Profile](#)

@username



## @username's Shared Categories

Category 1



Category 2



Category 3



Category 4



[Logout](#) [About](#)

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# Wireframes - Search Results Page

[Go](#)

Here is what we found for you:

All	Bing	MedlinePlus	Healthfinder
Result	See More	Save Page	
Result	See More	Save Page	
Result	See More	Save Page	
Result	See More	Save Page	
Result	See More	Save Page	
Result	See More	Save Page	
Result	See More	Save Page	
Result	See More	Save Page	

# Walkthrough

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**Thank you for your time!**

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