

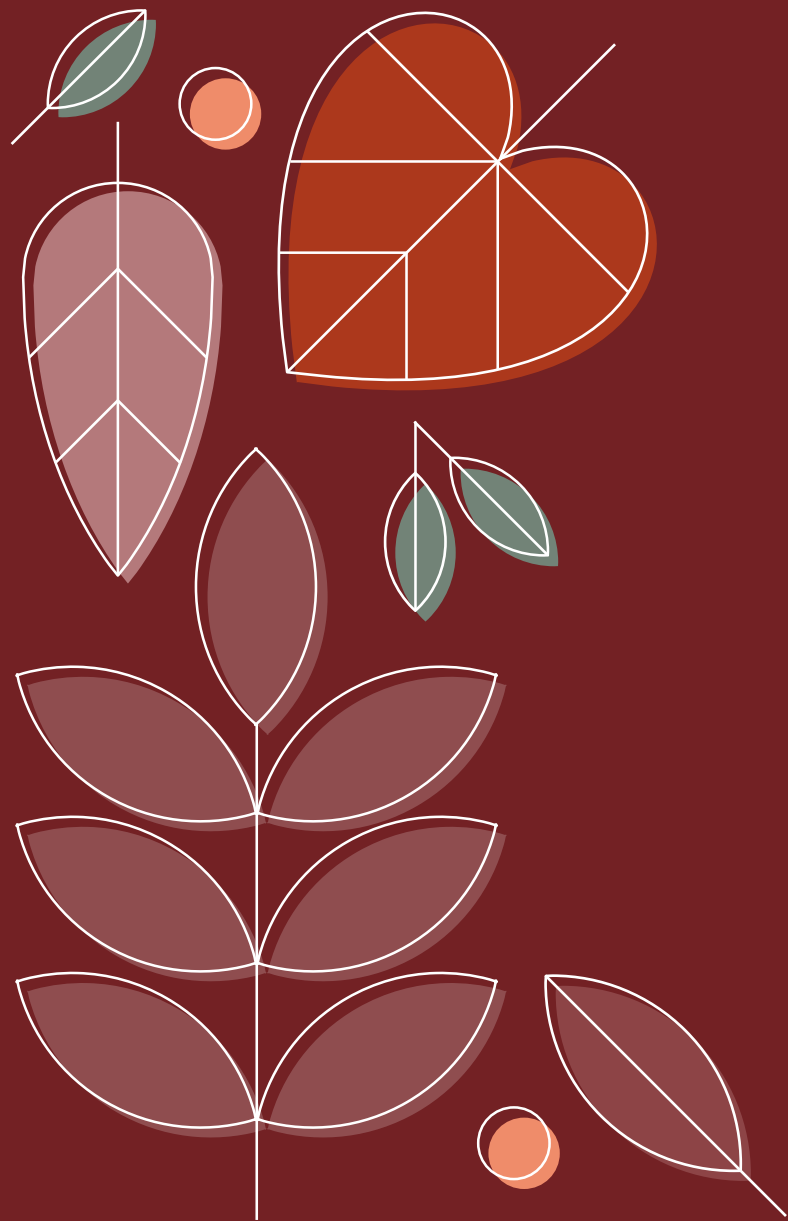
ROSAPARKS.APP

*Empowering the **wronged**;*

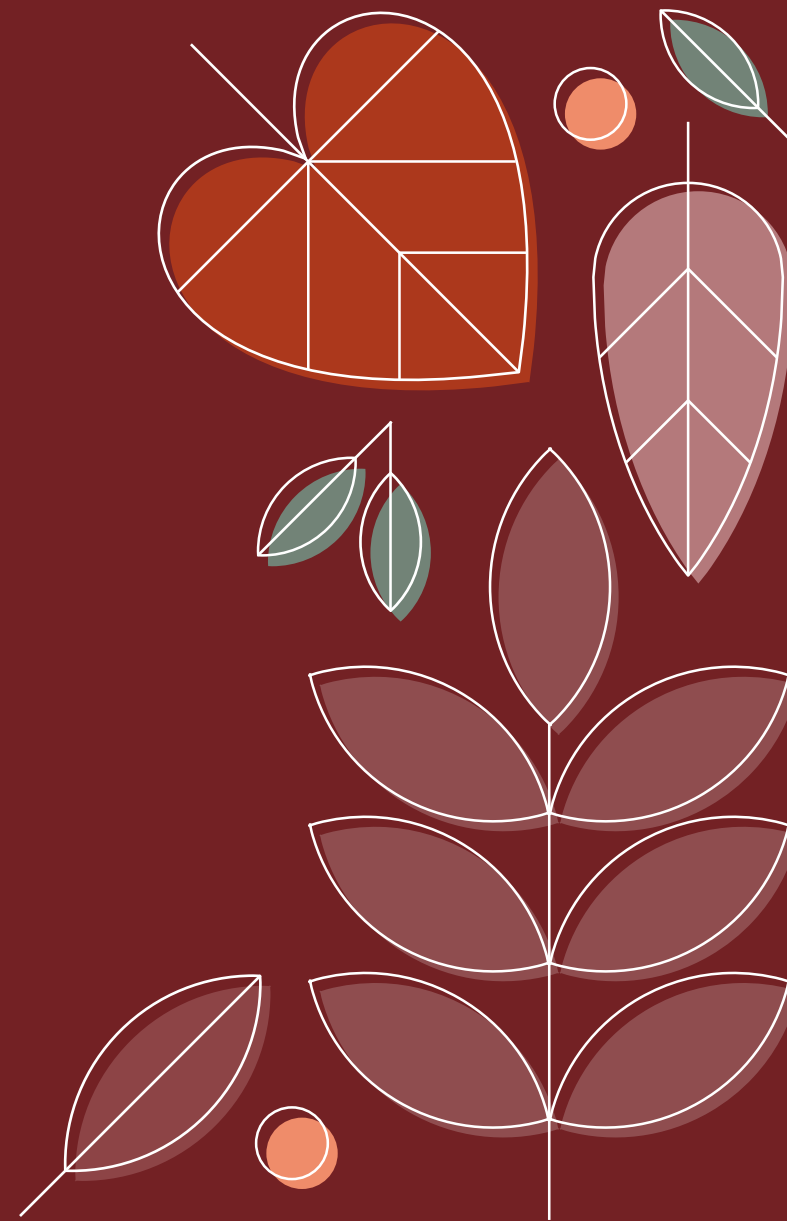
*Enabling the **witness**;*

*Teaching the **uninformed**.*





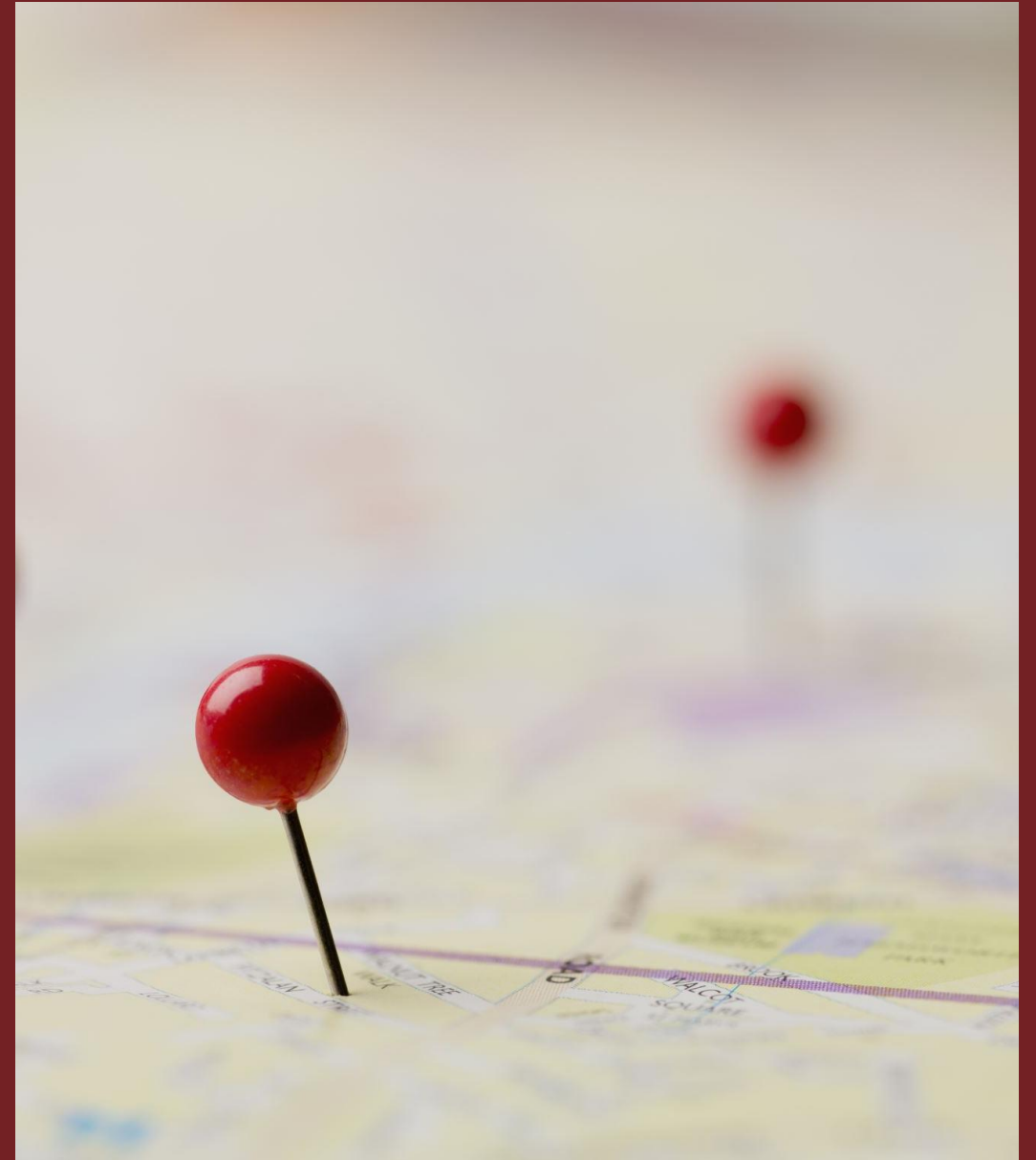
WHAT IS IT?



ROSAPARKS.APP



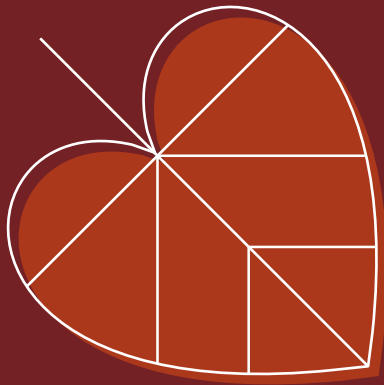
Rosaparks.app is an application that allows every individual to learn how to better behave in situations where people are victims of discrimination.



FOR WHO?



INDIVIDUALS: VICTIMS, OBSERVERS AND BULLIES



We teach individuals:

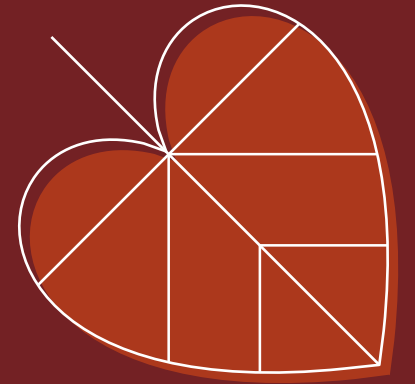
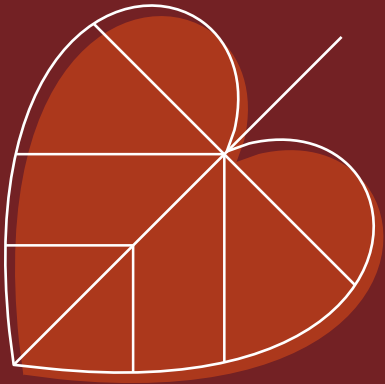
- **Victims** need to learn how to behave appropriately when being discriminated. They also need a safespace in which they can talk freely with people who understand them.
- **Observers** need to learn how to be proactive when they witness discrimination.
- **Bullies** need to understand the impact of their wrongdoings.

*Please note that in our communications we will never call victims « victims » because of the negative connotations that may be associated to the word. We will prefer the term « **wronged** ».*

*Likewise, calling people « bullies » only gets in the path of their learning, as it may make them reluctant to learning. We will then assume the best and consider that they are not bullies, they are just « **uninformed** ».*

FOR NGOS AND ASSOCIATIONS

- No great win was ever achieved alone. We realize that we cannot be alone in our fight against discrimination, and so we welcome the contributions of **partnering** associations and NGOS who chose to fight with us.
- We strongly encourage NGOs and Associations to share their **content**, and their **online courses**, on our platform. We will also reward their contributions by **helping** them **reach our userbase**, **publicising their works and events**, and sometimes even sharing a part of our profits in a Netflix-like business model (*we're still working on that at the moment*).





COMPANIES

- Thankfully, **companies** are nowadays under great pressure to face discrimination issues. That is for various reasons: legal ones, need for a diversified talent pool, public image... This leads HR departments of big companies to often pay for sensitization seminars. In Europe and in the US, the prices they pay are often **negotiated in a case-by-case basis** [1], and may reach **a thousand of euros for a single online seminar** [2-4].
- Providing a convenient solution with a decent pricing may be a profitable positioning into this market, and should provide the money needed to operate **«RosaParks.app»**.

Sources:

[1] <https://ifm-business.de/firmen/seminare/personalmanagement/anti-rassismus-strategien/> (Negotiation in a case by case basis, Germany)

[2] <https://www.diversitycampus.eu/en/contact/> (1285€ for online seminar, 1428€ for real life seminar, Germany)

[3] https://living-diversity.de/images/PDF_Sexismus-am-Arbeitsplatz-02_2020.pdf (350€ for one, 420€ for companies, Germany)

[4] <https://courseforsexualharassment.com/> (25 to 40\$ per person for a few hours < 3, United States. Labelled « the lowest price »)

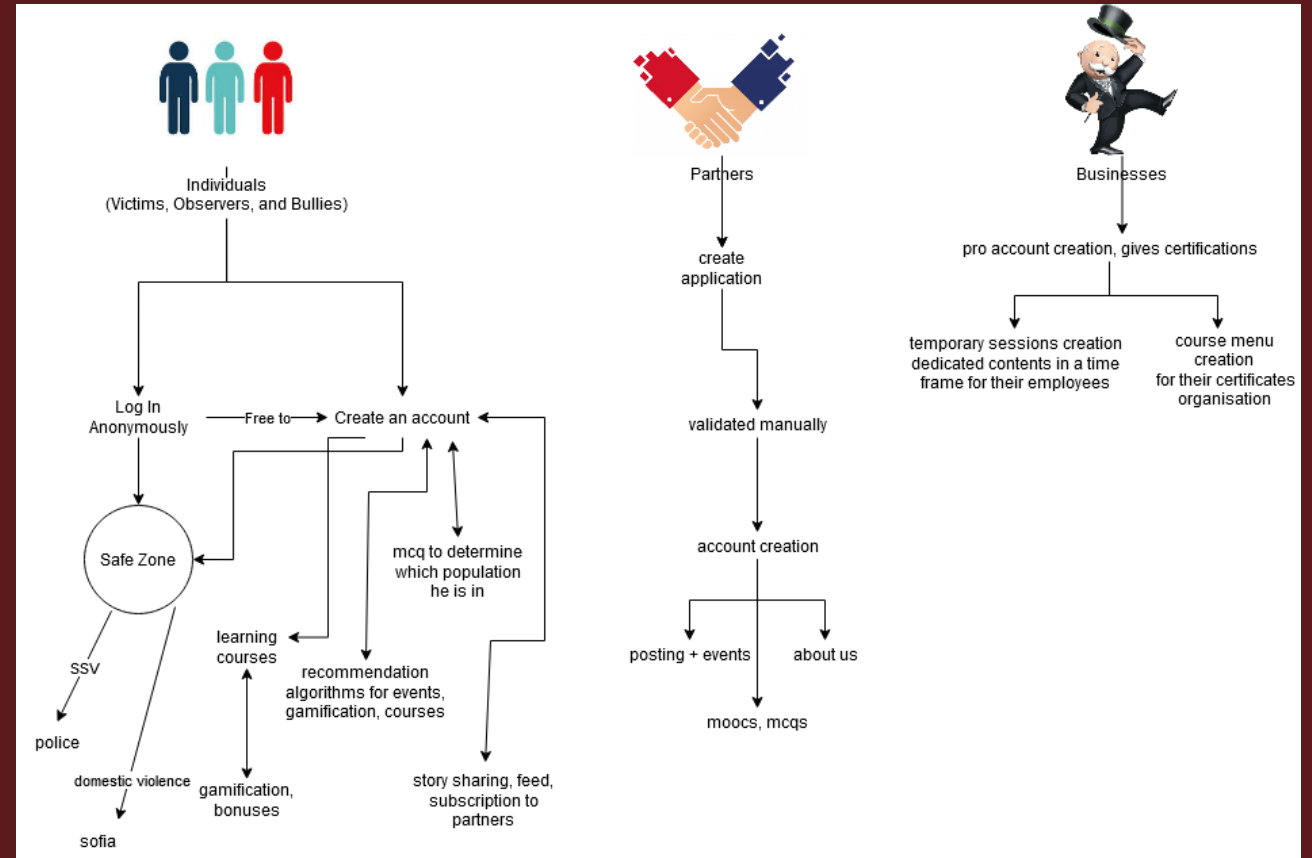


HOW?



User Experience

USER EXPERIENCE FLOWCHART



ANONYMOUS SAFE ZONE FOR INDIVIDUALS

- A **safezone** is an online chatroom in which 2 to 10 people may attend (parameterable). In every safezone, there is one « **expert** ».
- An « **expert** » is either a professional psychologist, an employee, a volunteer from a trusted partner, or a qualified trusted user.
- A user is deemed « qualified » and « trusted » if:
 1. *They were reported and found guilty of toxic behaviour,*
 2. *They successfully completed a chosen listed of courses on our platform,*
 3. *Their application was cleared by 5 randomly selected experts, and, if there is less than 100 experts in total, they also had a real life meeting with a RosaParks.app employee.*
- People can connect to a Safe Zone without the need of an account.
- Every exchange on the Safe Zone is encrypted in a peer-to-peer manner with an **AES 256** encryption.
- A « **report** » button is available on the Safe Zone to prevent experts or other users to abuse a given user. If that were to happen, the device of the user who reported the conversation would quit the chatroom, and send the decrypted and then re-encrypted logs of the chat to our servers for moderational purposes.
- An « **ask for more help** » button is available on the Safe Zone. Clicking on that button would redirect the user to the either the national suicide hotline or a psychologist, depending on the configuration of the server and the help available in the user's country.

ONLINE CLASSES (MOOCS)

We incentivize partnering associations and ONGs to put content online. The content can be in any form, but some of it will be organized in a structured manner to form courses.

These online classes provide value to companies who would rather pay for a flexible, possibly out-of-business hours formation to their employees (notably those that got reported for discriminating behavior). They are accessible for free for every individual, but we won't provide them certificates.

Paying companies do not directly create an account under the name of their employees, instead they create anonymous temporary sessions so that we cannot store compromising information on employees who are taking the formation for disciplinary reasons.



THE FEED: “MY NAME, MY STORY” & PARTNER EVENTS

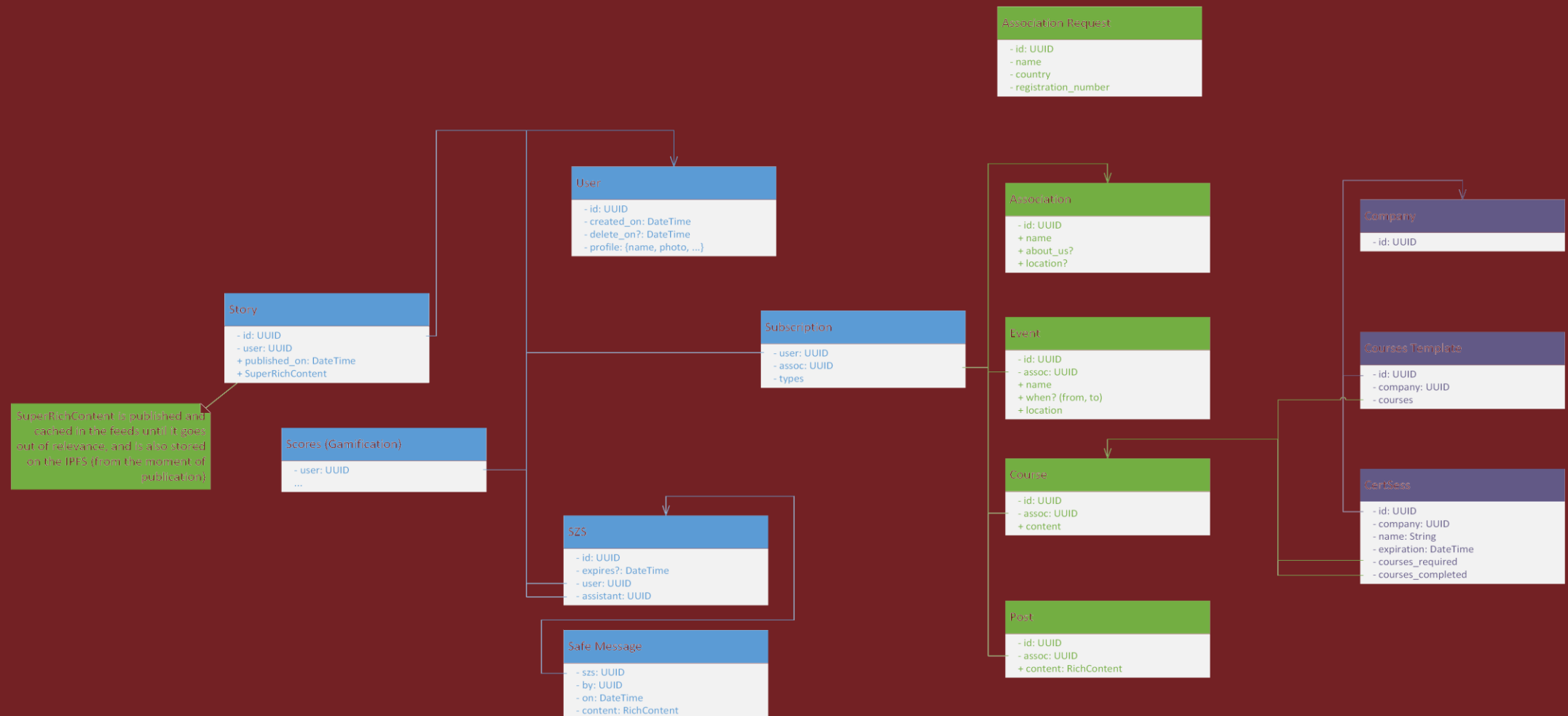
- The feed is a social-media like cocoon in which people only see content published by people they purposefully chose to follow, and the announcement of our carefully chosen partner associations.



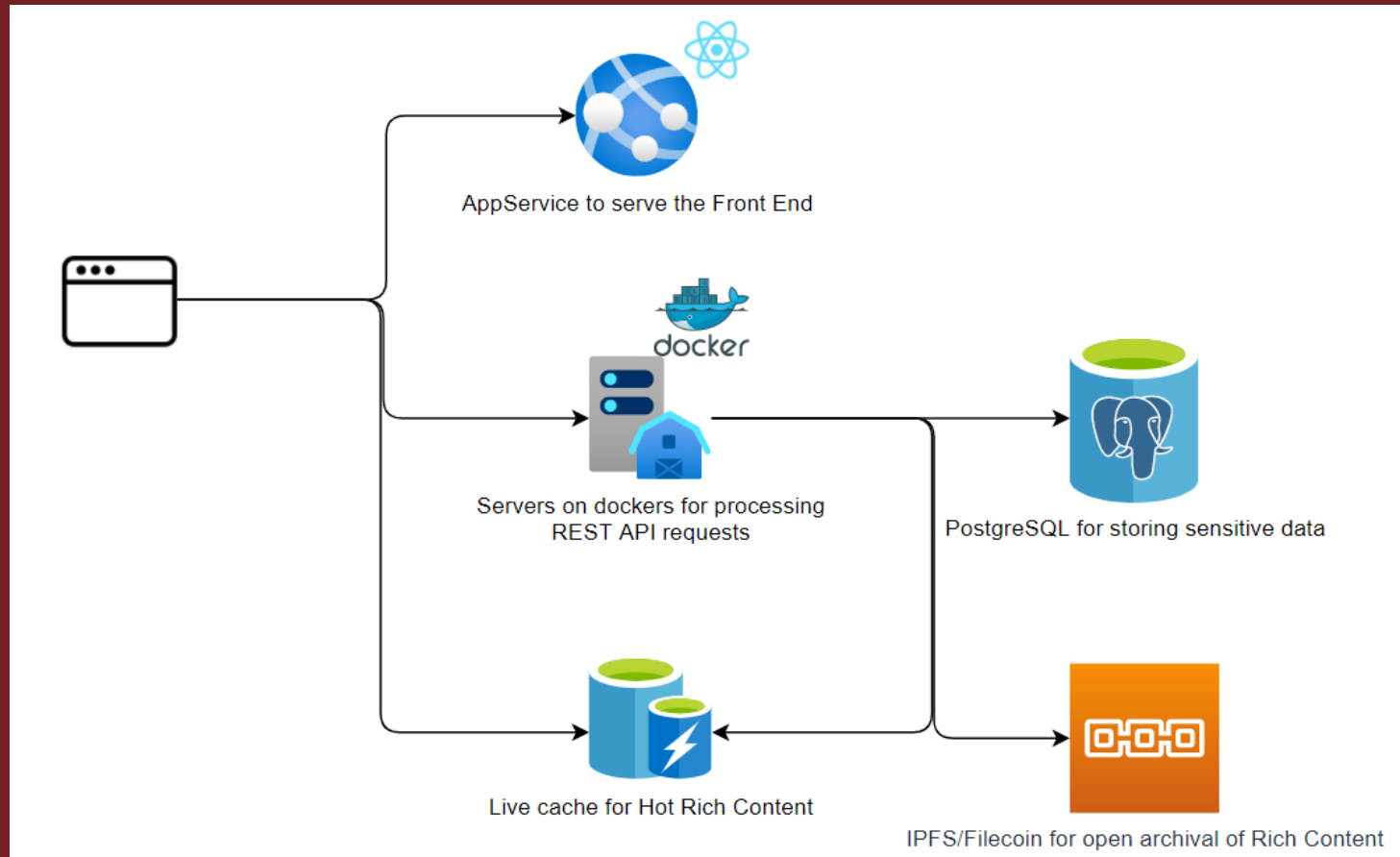
OUR CHOICE OF TECHNOLOGIES

- Backend in **Python Django**, and we know that it is slow language and a sub-optimal framework, however it is also **extremely easy to both learn and use**, which means we won't need to pay highly skilled engineers.
- The database is in **PostgreSQL**. It is **one of the first database engines that every developer learns**, and so it shouldn't be difficult nor expensive to find people to maintain it if needed. Please keep in mind that this may not be the best choice of million of users over a big number of geographically distinct places.
- The frontend is in **React.js**, this may contrast with our previous choices, as React.js developers may be more expensive than others, but it offers the advantage of being easily convertible into mobile applications, over all mobile operating systems, without the need of paying a different team of developers to handle the mobile and the web applications.
- For cloud technologies, we chose to use straightforward plug-and-play tools from the **Microsoft Azure Cloud**. There are also many other cost-related advantages in which we will dive deeper in the three slides following the next one.

SOFTWARE ARCHITECTURE: CURRENT DATABASE UML



OUR CLOUD ARCHITECTURE



TECHNICAL COSTS

We chose every element of our tech stack with cost minimization in mind. Moreover, we adopted an approach that offers the benefits of **only making us pay for what we use** (thanks to the [Microsoft Azure Cloud](#)), and of **being easy to shutdown** if we were to decide that the project should stop (for whatever reasons).

We estimate that to be capable of sustaining the load of **2000** concurrent users, with our current tech stack, we would need 3 B1 instances from Microsoft Azure, which is $49.263 * 3 = \mathbf{147.789\text{€ / month}}$.

Basic Service Plan

The Basic service plan is designed for apps that have lower traffic requirements and don't need advanced auto-scale and traffic management features. Pricing is based on the size and number of instances you run. Built-in network load-balancing support automatically distributes traffic across instances. The Basic service plan with Linux runtime environments supports [Web App for Containers](#).

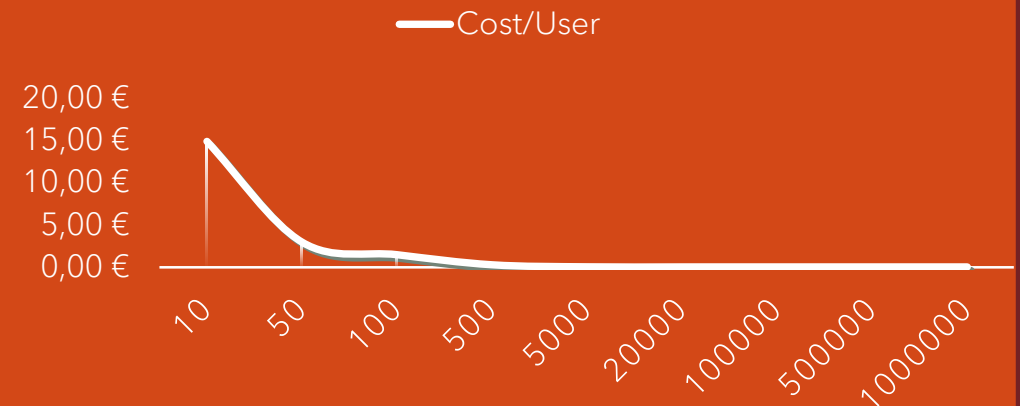
Instance	Cores	Ram	Storage	Pay as you go
B1	1	1.75 GB	10 GB	€49.263/month
B2	2	3.50 GB	10 GB	€98.525/month
B3	4	7 GB	10 GB	€197.049/month

TECHNICAL COSTS: SCALING UP WITH EASE

*The cost per user goes
exponentially down with the
number of users!*

C2		▼	✕ ✓ <i>fx</i>	=B2/A2				
	A	B	C	D	E	F	G	
1	Users	Costs	Cost/User		DBs	Rest	PWA	
2	10	148.50 €	14.85 €		1	1	1	
3	50	148.50 €	2.97 €		1	1	1	
4	100	148.50 €	1.49 €		1	1	1	
5	500	148.50 €	0.30 €		1	1	1	
6	5000	297.00 €	0.06 €		4	1	1	
7	20000	940.50 €	0.05 €		14	4	1	
8	100000	4,554.00 €	0.05 €		67	20	5	
9	500000	22,720.50 €	0.05 €		334	100	25	
10	1000000	45,391.50 €	0.05 €		667	200	50	

COST/USER FOR GIVEN NUMBER OF SEMI- CONCURRENT USERS



USING FILECOIN: FOR FRIENDS AND PROFIT

- In order to give back to the community, the entirety of rich content produced by the users of the Rosa project will be open sourced on a decentralized blockchain – Filecoin. As a hyper-competitive storage solution, with inherent security and persistence, it is perfect for cheap and durable storage of massive amounts of data whose purpose is ultimately to be openly available. It also make it so we can archive old data on the blockchain instead of deleting it, knowing that the volunteers will be rewarded in crypto currency without costing us any money.



PROOF-OF-CONCEPT: YOU CAN FIND ALL OF OUR CODE HERE:

- Our Github organization for the hackathon: <https://github.com/Barmanjoke>
- Our front-end code: <https://github.com/Barmanjoke/Rosa-Front-end>
- We had to fork and modify an existing React Component to make the SafeZone: <https://github.com/Barmanjoke/react-chatbox-component>
- Our back-end API server: <https://github.com/Barmanjoke/Rosa-Back-Central>
- We tested data vizualisation tools for fun : <https://github.com/Barmanjoke/Rosa-Back-Game>

Rosaparks.app

Empowering the *wronged* , enabling the *witness* , teaching the *uninformed*.

[Access Safezone Anonymously](#)[Register](#)[Log In](#)

PROOF-OF-
CONCEPT:
CURRENT LOOK
OF OUR FRONT END

Rosaparks.app

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[Access Safezone Anonymously](#)

[Register](#)

[Log In](#)

Rosaparks.app

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Access Safezone Anonymously

New here? You are...

An Individual

A Partner

A Business

Log In

if you access the wrong
button, you can still change it



The diagram illustrates the user flow for new users. A central menu titled 'New here? You are...' offers three options: 'An Individual', 'A Partner', and 'A Business'. 'An Individual' is highlighted with a yellow border. Two red arrows originate from the explanatory text at the bottom. One arrow points to the 'Access Safezone Anonymously' button (a blue rectangle on the left), and the other points to the 'Log In' button (a green rectangle on the right). This indicates that regardless of the initial selection, users can still access the safezone anonymously.

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Access Safezone Anonymously

What is the name of your organization?

organization

1

What is your email?

email@email.com

2

At which phone number shall we contact you?



+000

3

What is your website?

www.rosaparks.app

4

Is there anything you want to tell us?

we would really like to help!

5

Send

6

Log In

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Access Safezone Anonymously

What is your first name?

Firstname 1

What is your last name?

Lastname 2

What is your email?

email@email.com 3

On which day are you born?

4 3/24/2022 X

Send 5

Log In

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Access Safezone Anonymously

Are you interested in using our software?

Contact us to get a quotation!

Log In

What is the name of your company?

Company

What is your email?

email@email.com

At which phone number shall we contact you?



+375 895 7456

How many employees do you have?

< 250

Is there anything you want to tell us?

I really need you all!

1

Send

2

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Empowering the wronged , enabling the witness , teaching the uninformed.

[Access Safezone Anonymously](#)

[Register](#)

[Log In](#)

Welcome to your Safespace!

About your interlocutor:

You have been matched with **Hedy Lamarr**. Hedy Lamarr is known for her career as an actress, but she was also a **brilliant engineer** who co-invented a radio guidance system in WWII. Unfortunately, **no one took her seriously** because she was a **woman**, and so it took 20 years for her technology to be rediscovered.



Hedy Lamarr
Hello there



Hedy Lamarr
How can I help you?



Hedy Lamarr
Yeah! 😊

Oh my God!!! Are you really Hedy Lamarr???



I've just left the school and...



Type something

Report an abuse.

Contact a psychologist.

THAT'S IT FOR NOW!
MORE COMING LATER ON ^_^ !

