

# SORTERIA

Your medical security, our responsibility



Get Started



## 02 - Project Description

Sorteria is an interactive platform which ensures seamless easy and hassle free storage of medical documents and guarantees security for the same. This reduces the chances of errors and helps in managing documents and prescriptions very easily and quickly. The primary objective of our website is to guarantee security and thus this cloud and blockchain based database platform is aspired using blockchain technology. Benefits of this document being in the form of a soft copy is that it can be accessed from anywhere.

The main feature of this website is efficient and secure storage of medical documents, Versatility, and quick access of the stored documents regardless of location of device. Security of important medical documents which tend to get misplaced or is prone to being tampered with. Since these documents are stored securely there is no question of misplacement of records in turn we note a reduction in the hassle of carrying around multiple documents.

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## TECH -STACKS USED:

- ❑ HTML
- ❑ CSS
- ❑ JAVASCRIPT
- ❑ BOOTSTRAP
- ❑ NODE JS
- ❑ SOLIDITY
- ❑ TRUFFLE
- ❑ GANACHE
- ❑ METAMASK
- ❑ PYTHON
- ❑ ETHEREUM
- ❑ WEB 3

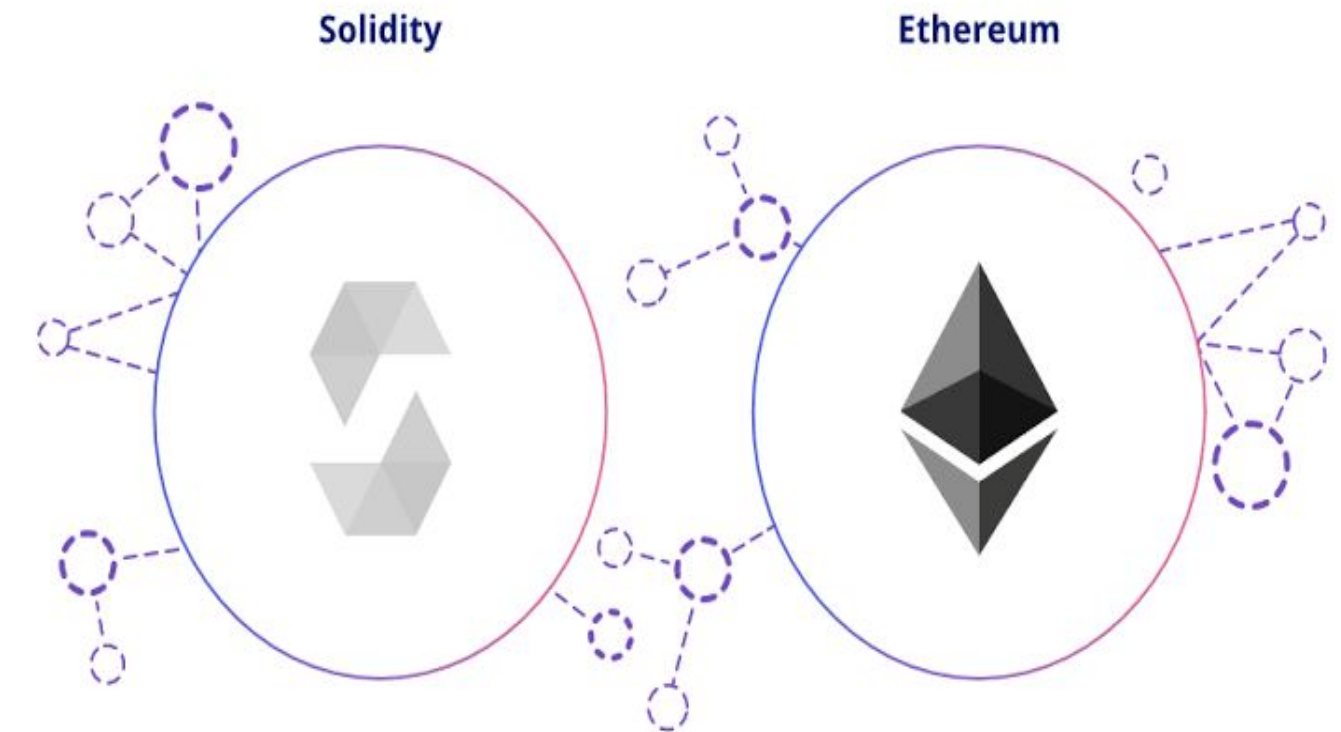
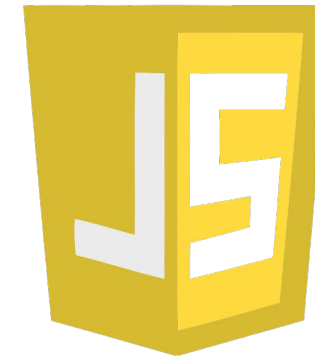
**HTML**



**CSS**



**JavaScript**



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## 03 - Brief RunDown of our GitHub Repository

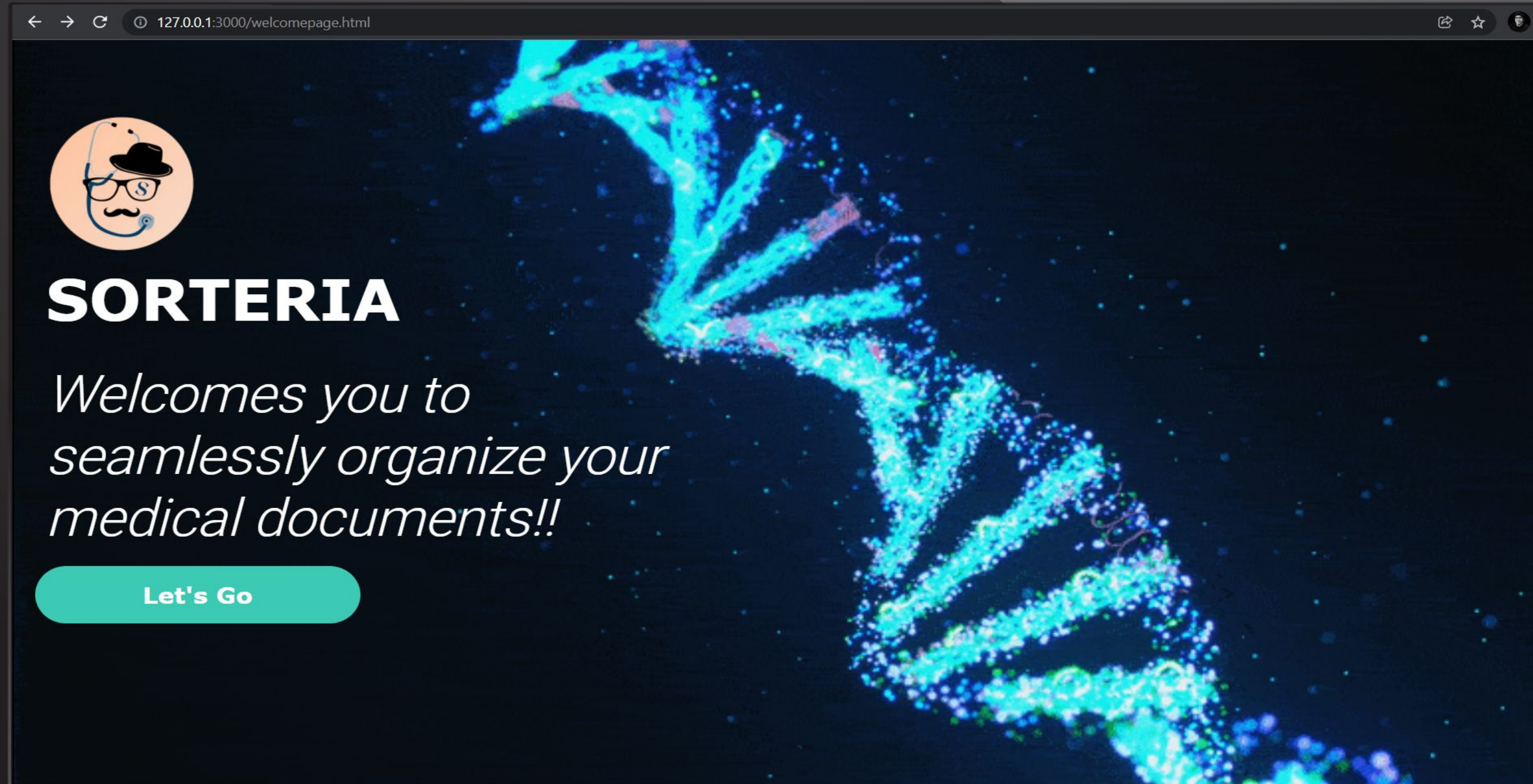
Our github repository is in a state of daily and continuous change. We are updating the codes and the files as and when required.

1. The basic and primary readme file mentions a few primary details of our project including a small preview of how the website will look along with the tech stacks and languages used. It also includes a tiny stat box showing the commits, pull requests, issues and other details.
2. The media-files folder is a folder meant for storing every picture animation or other media files. This includes the custom images and animations that have been used for the frontend part of the project.
3. The welcomepage.html and the welcomepage.css has the codes for the page that will be visible to the users on opening the website.
4. The frontpage.html and frontpage.css files contain the respective html and css codes for the page which will link to sign in as well a drop down menu which can be used to find the contact all nearby doctors and medicine centres in an area.
5. In a similar way the choicepage.html and choicepage.css files contain the code for the page which will give the user a choice whether to sign in if he/she is already a user or to sign up if it is their first time visiting the website.
6. A number of files are to be added along with a major portion of the backend part.

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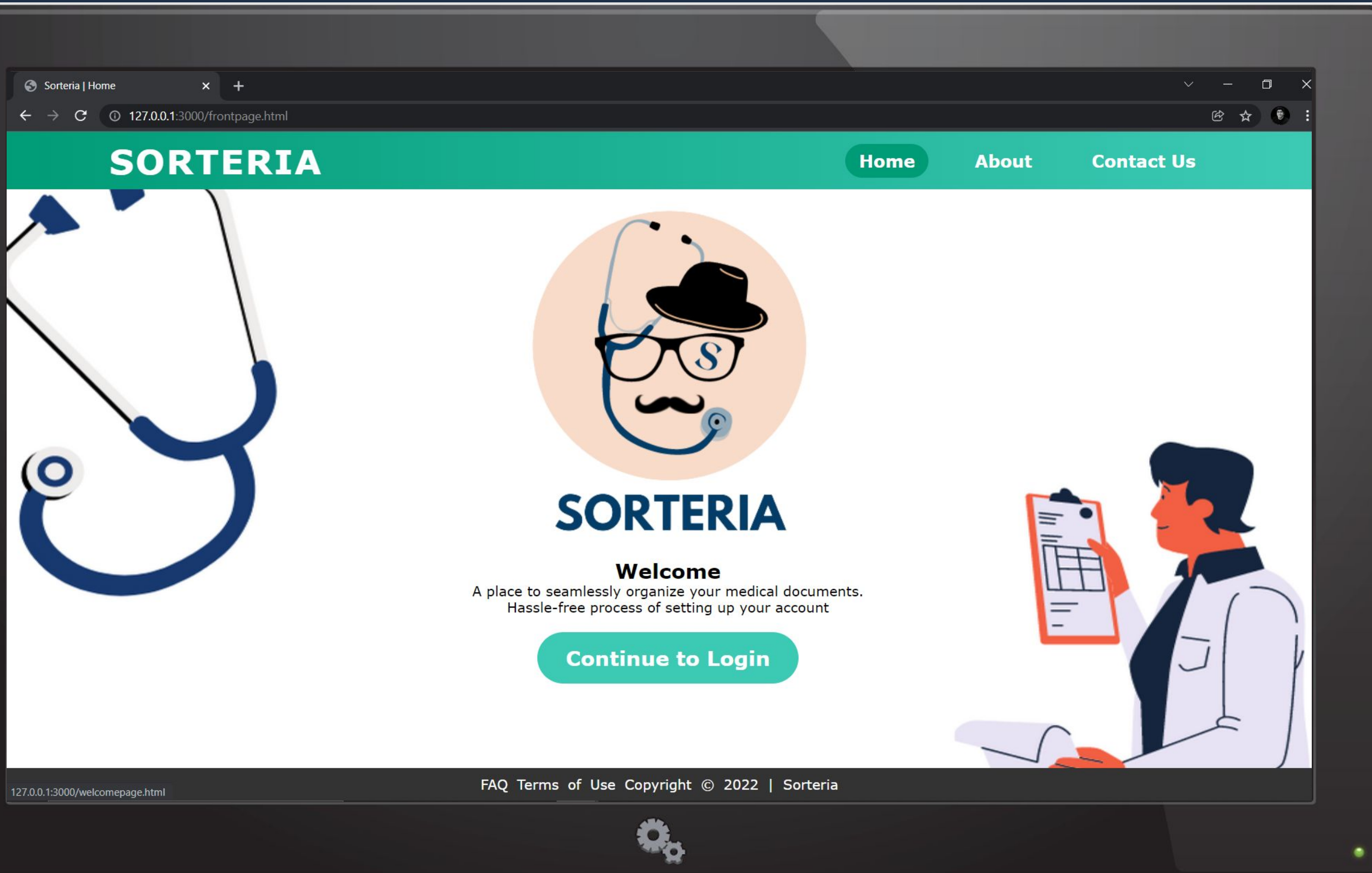
## 04 - Working Model



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# SORTERIA

Your medical security, our responsibility

SIGN IN

OR

SIGN UP

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## 05 - Current Issues

Issues and problems faced during execution of any project is very very necessary as it prevents us from making the same errors in the future. Managing issues is no different than managing a project in that it requires a process and a plan to implement the strategy. Being beginners we have faced issues ranging from coding errors to planning controversies. Few of the notable ones which we might have problems with in the future as well are:-

1. Implementing Blockchain - Blockchain uses SHA256 hashing algorithm and Merkle tree data structure which is a major challenge to be implemented
2. Web3.js lacks integration in modern web browsers thus providing less access to most users.
3. Other major challenge is interaction of Ethereum blockchain and Ethereum smart contract.
4. Online resources like community support and available documents are very limited for the creation of smart contract.
5. Performance problems of smart contracts are hard to handle as the programming language and the virtual machines still have a number of limitations.





## 05 - Current Issues

Speaking of Issues here is a little bit about the issues that we plan to solve using our website.

1. Medical data is information that needs to be stored and saved for extensive periods of time. This is sometimes a hassle taking into account the amount of physical documents that we have. Our website comes to rescue right here to provide easy and secure storage of medical documents.
2. Versatility and carrying the different documents is troublesome and prone to errors like carrying the wrong documents. Versatility and quick access of the stored documents regardless of location of device is a very important and key feature of our website which aspires to solve this issue. As these documents are soft copies it cannot be misplaced.
3. Cross Platform incompatibility is a feature which is still in the process of development in many softwares applications and websites. We hope to use this feature for hassle-free seamless carrying of multiple documents to hospitals.

## Future Scope

The aim of our project is to prepare a secured database for patients(clients).This will not only benefit patients but also ease doctors to have a proper organised ailment history of the patients.This feature will broaden the scalability of our project in the following ways:-

**In hospitals:-**Hospitals can keep this software to keep a track of all the health ailments of every patient . As our project is built using blockchain technology ,so the data of each patient will remain secured and untampered.This will enable us to manage the records of all patients seamlessly and without the headache of losing any data, that too in an organised way.

**By pharmaceutical shops:-**Pharmaceutical shops in any location of the world can get access to the health information of every patient and can give them proper medicine in case of emergencies.Patients do not need to carry the prescription all the time to the shop for getting medicine. In case of sudden emergencies we patients can easily log in to their sorteria account to show prescription and doctor's assent.

**By government:-**Government can safely keep a decentralised app for the easy access of health related information of each citizen of the country .If government takes up Sorteria then there will be better reach of this application to all common people of the country and ensure a safe private record of each patient.

**Post Covid Situation:-** With the rapid development of technologies used in the healthcare sector and changes in healthcare operations post-COVID-19, it's more important than ever for databases in healthcare to be organized, well-maintained, and easy to use.

A doctor no matter how brilliant or talented, needs the help of technology for the betterment of his work, for the betterment of management of his patients at present as well as in future. Today is the era of technology. If time advances one step, technology advances two step, so this type of technology will be the cardinal tool for doctors and patients in future.



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