

System Requirement Specification

To guarantee a successful development process is necessary to define the different functionalities our system has to have in order to fulfill its purpose. These specifications will be classify into functional requirements and non-functional requirements

Functional Requirements

- ❖ Users should have the option to register in the system for accessing the services.

The user will provide the following information: 1) Full name 2) Date of Birth 3) Country and city of Birth 4) Photo of his/her ID 5) Email 6)Phone Number 7)Postal Address 8) Password. This information will have basic validation to keep data clean in the database.

After the registration, the record will be pendent until the user confirms the validation of his/her email address through a link that will be sent to his/her email. The user can not have access to any service until his/her email address is confirmed.

The password has should be at least 8 characters in length, has at least one uppercase, has one special character. Maximum length of 15 characters.

- ❖ The user should have access to his/her account using his email address and password. Login
- ❖ The user should have the option to upload his final testament in the system.

The user will provide the following information: 1) His/her final will in PDF format 2) The information of his/her attorney (Full name, ID number, telephone number, email address, postal address). Before finalizing the request the system will ask the user the confirmation that this is his/her final will with a digitally signed declaration.

The system will store the testament in the blockchain. In case the user has a previously uploaded will the system will change the information of it in the database and it will add the hash information of it in the new block that will contain the new will with the purpose to link related blocks and easily tracking their history.

- ❖ The user should have the access to query their final will and the previous ones in case it applies.
- ❖ Attorneys should have the option to report the death of his/her clients in order to request access his/her final will/testament.

Attorneys will provide an image of their ID and the certificate of death of his/her client, after the submission, the system will create a request to release the testament and inform through the interface the request's answer will be sent to the attorney's email.

- ❖ The system should have an administration interface to process or decline requests for releasing testaments.

All pendant requests should be listed in the user interface. After the user validates the ID provided by the attorney and the certificated of death for a request, the testament record will be linked to the request and this must be marked as "Documents Validated" then the system will send an email to the attorney to inform him/her and request confirmation of his/her email (to guarantee that was the attorney who request the release of the will) to the release the testament. On the contrary, if the user finds the ID or certificate of death lacks of validity the request will be marked as "Declined" and an email will be sent it informing about it to the attorney.

- ❖ The system should allow access to the testament after the confirmation of the attorney's email is received.

The system will receive the email confirmation from the attorney's email and automatically will : 1) mark the testator's account as "Death confirmed" 2) sent an email to the attorney with a link to access the testament 3) mark the request of release as "Processed"

Non-functional Requirements

- ❖ The web application should work properly in Chrome, Safari and Firefox
- ❖ All records in the Off-chain storage should have auditory fields of date and time of creation, date and time of last modification.
- ❖ Communications between client-server as email services should use encryption protocols in their communication

10. References

[1]anwalt.org, “Testament: Welcher Form muss es genügen? - Anwalt.org,” Anwalt.org - Finden Sie den richtigen Anwalt!, Dec. 07, 2002. [Online]. Available: https://www-anwalt-org.translate.goog/testament-form/?_x_tr_sl=de&_x_tr_tl=es&_x_tr_hl=es&_x_tr_pto=sc. [Accessed: Jan. 17, 2023]