

Requirements Homeowners Association

Functional Requirements

MUST HAVES

- The user must be able to create an account.
- The user must be able to create a new HOA or join an existing one.
- **Every HOA must have an associated country, city and a custom name.**
- The user must be able to register with their address **that contains a country, city, street, house number, and postal code.**
- Every HOA must have a board which contains current requirements.
- A **board election** must be held once every year.
- Any member can apply for a board if given requirements are met:
 - An applicant will need to have been part of the HOA for at least 3 years.
 - An applicant is not allowed to be in 2 boards at once.
 - A member is not allowed to have been on the board for more than 10 years in total for a specific HOA.
 - Any member of the HOA can vote for a potential applicant, except themselves.
- A member must be capable of changing their vote.
- Members of the HOA must be able to vote for the next board.

SHOULD HAVES

- Any board member should be able to request a rule change, whether it's a new rule or change of an existing one.
- A proposal requires a majority vote to pass.
- Any request should be approved in a vote that takes 2 weeks after its proposal.
- Only current board members can vote on the new proposal.
- A proposal voting should not count abstain votes.
- The user should be able to leave a HOA.
- Every HOA should have a public notice board.
- Any member of the HOA should be able to publish activities.
- Every activity on the notice board should require **a name, a time, and a short description.**
- All members should be able to show interest in given activities that they wish to participate in by selecting Interested/ Going.
- Activities should be visible only to the members of the pertaining HOA.
- Old activities should no longer be visible on the notice board.

COULD HAVES

- The app could check if an user has the same address as the HOA address that he wants to join.
- In the case a proposal gets accepted all members of the HOA could be notified that a change has taken place and what that change was.
- All elections could be public in their entirety, both results and vote count.
- All users could be able to view the full history of the HOA and its elections.
- The user could be able to report other users of violating a requirement including a reference to the specific requirement that was broken.
- A board member could be able to change the voting dates.

WON'T HAVES

- The app shall not have a GUI.

Non-Functional Requirements

- The app shall be implemented in Java 11 with Spring Boot/Security and Gradle.
- The app should be maintainable and expandable.
- The system should make use of at least 2 microservices.
- The interactions with the system are handled through APIs.
- For the iterations after the delivery of the first fully working version, the Scrum methodology shall be applied.
- The app should have secure authentication utilizing member IDs and a hashed password.
- The member IDs should be unique.