STAKr

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Problem Statement

Many people in the professional world need a way to manage appointments. The problem, though, is that many calendar applications do not present a streamlined way to manage them.

Product Objectives

Build an application using Python-3 and the Flask Framework to create an appointment system. This system will allow the customer and owner to communicate with one another by creating meetings through a Calendar-like interface.
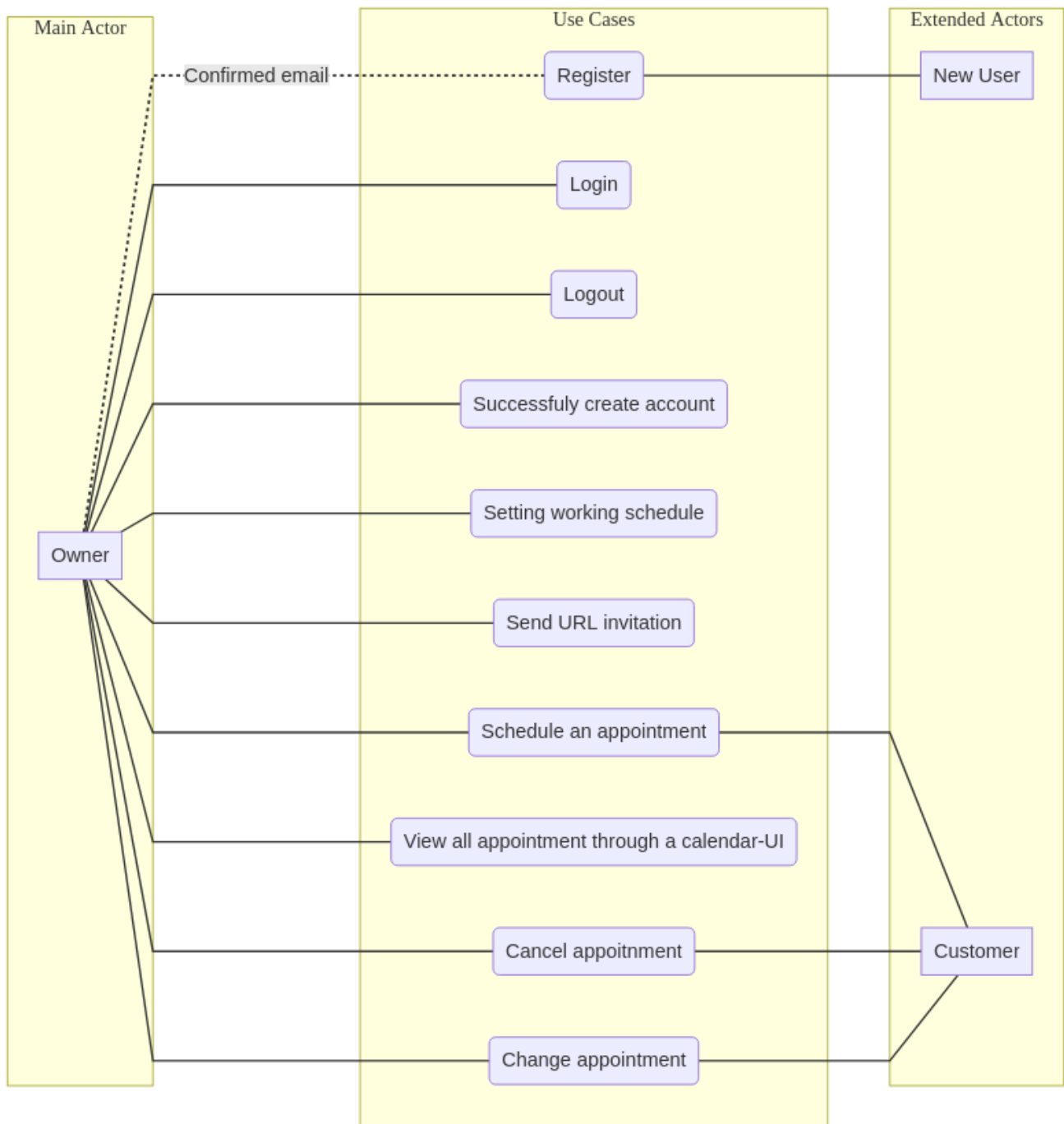
Functional Requirements:

- Database should hold owner login information

- User should not be able to login to an account without providing matching information

- System sends confirmation emails for both registration and appointment confirmation

- Owner can configure what times they are available using Calendar

- Customer can follow email to select desired appointment time with Owner

- Owner can successfully log out of the system

Non-Functional Requirements:

- System must display messages in English

- System will respond to owner and customer commands within 3 seconds

- The site shall be able to run on Windows, Mac, and Linux machines

- System must use Gregorian calendar

Use Case Description

UML Diagram

Owners' Use Case Description

Register

Summary: Allows a user to register for an account
Actor(s): Unregistered user

Pre-conditions:

- User must not have an existing account
- User must have a valid email address

Primary sequence:

1. Click on "Register"
2. Input desired login info (email) and password
3. Click on "Create Account"
4. Confirm email address

Alternative sequence:

1. Email does not exist
    - System displays error message "Invalid email address" to the customer

Post-condition:

1. Customer email is successfully confirmed
    - Customer receives a confirmation email and has accepted it
    - Customer can now login with their credentials
2. Email has not been confirmed
    - Customer can not login because they have not confirmed the email verification
3. Customer has not successfully created an account
    - No account was created presumably due to invalid login info

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Login

Summary: Allows a user to log in to their account
Actor(s): Registered-Owner

Pre-conditions:

- Registered an account
- Confirmed email address of account

Primary sequence:

1. Enter a username and a password
2. (Optional) Select "Remember Me"
3. Click "Login"

Alternative sequence:

1. If user does not have an account
    - User inputs an email and password that has not been made
    - System displays message to customer saying the account does not exist
2. Invalid email
    - User inputs an email that has not been registered
    - System displays message to customer saying the account does not exist
3. Invalid password

- User inputs an email matching one in our database, but has an invalid password
- System displays message to customer saying the password was typed incorrectly
4. User wants to register an account
    - User selects the "Register" button
    - System redirects user to the register screen

Post-condition:

1. User has successfully logged in
    - User is redirected to his/her home page by the system.
2. User has not successfully logged in
    - User remains on the login page until they provide proper credentials

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Configure active schedule

Summary: Allows the owner to configure their desired time for customers to make an appointment with
Actor(s): Owner

Pre-conditions:

- The owner must be logged into their account

Primary sequence:

1. Click on "Set Working Schedule"
2. Choose desired "Working Time" through a drop-down list
3. Click on "Save"

Alternative sequence:

1. Click on "Cancel"
    - System redirects User to home page

Post-condition:

1. Working Schedule has been set
    - System displays a message "Working Schedule set" to the Owner
    - System redirects the owner to home page
2. Working Schedule was cancelled
    - System redirects the owner to home page
    - Working schedule is the same as it was previously or not set if the owner has not set it previously

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Send appointment invitation

Summary: Allows the owner to get their unique URL which allows their customer to create an appointment from their selected time
Actor(s): Owner

Pre-conditions:

- The owner must have an account
- The owner must be logged in

Primary sequence:

1. The owner will log into their account
2. The owner click the "My appointment link" button
3. The owner must click and copy a unique URL-link

Alternative sequence:

1. The owner will add customers' emails into a text box
2. The owner must click "Send my invitation"
3. An email will be sent to customers' emails

Post-condition:

1. The owner chooses to copy their URL
   - A URL is available for copy/paste
2. The owner chooses to send an email
   - An email with the owner's URL will be sent to their customers

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Customers' Use Case Description

Make an appointment

Summary: Allow a customer to make an appointment through the owner's invitation-URL
Actor(s): Customers

Pre-conditions:

- Must have the invitation-URL from the owner
  - The customer receives URL through email
  - The customer recieved URL directly from the owner

Primary sequence:

1. The customer selects the link URL in the email
2. The calendar shows the available date/time and customers pick their date.
3. Confirm Reservation
   - If data were valid: confirmed reservation

- If data were invalid: showed problem in reservation

Alternative sequence:

1. Customer cancels making the appointment

   - Customer clicks "Cancel"
   - System displays message "Appointment was cancelled"

2. Owner is busy at selected time

   - System displays the message "The person is busy at that time. Please select a new time"

3. Error when connecting to database information

   - System displays the message "System error communicating to database. Please refresh the page and try again shortly and make sure you have proper internet connection"

Post-condition:

1. Customer has successfully made appointment

   - Notify the owner and customer about the appointment.

2. Customer cancels making appointment

   - Notifications not sent to customer and owner

3. Owner is busy at selected time

   - Notifications not sent to customer and owner

4. Error when connecting to database information

   - Notifications not sent to customer and owner

Glossary:

The owner should be able to: log into their account, configure their working schedule, get/send a URL invitation link to make an appointment with them.
The customer should be able to: make an appointment with the owner through their invitation URL without the need to log in.