# **Scheduled Reminder**

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Git Repository: <a href="https://github.com/amrutapednekar/ScheduledReminders">https://github.com/amrutapednekar/ScheduledReminders</a>

# **22 February 2022**

### **Create app**

Create a new rails app and commit to github repository..

- Create rails app
  - o rails new ScheduledReminders
  - o cd ScheduledReminders
  - Created new github repository named ScheduledReminders
    - https://github.com/amrutapednekar/ScheduledReminders

```
o git remote add origin
  https://github.com/amrutapednekar/ScheduledReminders.git
o git add -A
o git commit -m "Initial commit"
o git push -u origin main
```

# **Setup PostgreSQL database**

- Edit Gemfile
  - Comment gem 'sqlite3' and add below code

```
# Use postgresql as the database for Active Recordgem 'pg', '~> 1.1'
```

Uncomment

```
gem 'bcrypt', '~> 3.1.7'
```

- Edit Gemfile for PostgreSQL
- Run command

```
O Bundle install
```

- o rake db:create
- o rake db:migrate
- o rails s
- Application is running on <a href="http://localhost:3000/">http://localhost:3000/</a>

### **User authentication**

- Create user model, users controller and sessions controller
  - o rails g model user email password digest
  - Add <u>has\_secure\_password</u> in users model and model validations
  - o rails g controller users new create
  - o rails db:migrate
  - o rails g controller sessions new create login welcome

# users - id - email - password\_digest - created\_at - updated\_at

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- Implemented user authentication.
  - Welcome page

### Welcome to Scheduled Remider Application

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users

# User Authentication If you have already created an account with your email address, please login. Login If you have not created an account yet, please sighup. Sign Up

User Signup

# Welcome to Scheduled Remider Application

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users

# Sign Up

Email
amruta.jadhav1@gmail.com
Password
•••••
Create User

User login

# Welcome to Scheduled Remider Application

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users



User welcome page

# Welcome to Scheduled Remider Application

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users

**User Authentication** 

### You are Logged In as , amruta.jadhav1@gmail.com

Logout

- o Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/9f 40a0d4a37200ce3367d00f6bd362eaed53a862
- Validations
  - Validates uniqueness of email id
  - Validates presence of email id
  - Validates presence of password
  - Authenticates if email id and password matches
  - o Redirects to login if authentication fails
  - Stores hashed version of password in database

# **23 February 2022**

### **Reminder Create Read Update Delete**

- User has many reminders
- Generated scaffold for Reminder
  - o rails generate scaffold Reminder title:string body:text user:references time:time start\_date:date end\_date:date day\_of\_month:integer day\_before\_eom:integer last\_day\_month:boolean
  - o rails db:migrate

#### reminders

id

- user\_id

   title

   body

   time

   start\_date

   end\_date

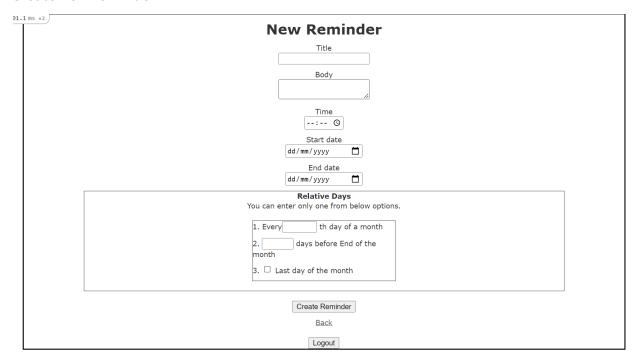
   day\_of\_month

   day\_before\_eom

   last\_day\_month

   created\_at

   updated\_at
  - Implementation of reminder CRUD
  - Model validations
  - Create new reminder



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### • List Reminders

4.0 III5 ×3

### **Welcome to Scheduled Reminder Application**

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users

			Rem	inders	5					
Title	Body	Time	Start date	End date	Day of month	Day before eom	Last day month			
My first reminder	Reminder Body	2000-01-01 11:00:00 UTC	2022-02- 25	2023-02- 23	2		false	Show	Edit	<u>Destroy</u>
Rent reminder	House rent reminder	2000-01-01 14:53:00 UTC	2022-02- 25	2022-07- 29		3	false	Show	<u>Edit</u>	Destroy
			New	Reminder						
				_ogout						

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### Show Reminder

**Welcome to Scheduled Reminder Application** 

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users



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• Edit reminder

**Welcome to Scheduled Reminder Application** 

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users

Editing Reminder
Title My first reminder
Body Reminder Body
Time 11:00 ①
Start date  25/02/2022
End date 23/02/2023
Relative Days  You can enter only one from below options.
1. Every 2 th day of a month 2. days before End of the month
3. □ Last day of the month
Lindata Damindar

- User can delete reminders created by him
- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/dfe0052a
     35f306320e2d5d35c31cced7ff2fcb23
- Validations
  - Validates presence of title
  - Validates presence of body
  - Validates presence of time
  - Validates presence of start date
  - Validates presence of end date
  - Validates numericality of day\_of\_month
  - Validates day\_of\_month is less than or equal to 25
  - Allows nil to day\_of\_month
  - Validates numericality of day before end of the month day\_before\_eom
  - Validates day\_before\_eom is greater than or equal to 1 and less than or equal to 5
  - Allows nil to day\_before\_eom
  - Validates only one relative date is entered among below three
    - Day of month

- Day before end of month
- Last day of month

If not, it displays an appropriate error message.

 Validates if the end date is greater than start date. If not, it displays an appropriate error message.

# **24 February 2022**

### Add notifications on create/edit reminder

- Reminder has many notifications
- Generated scaffold for Reminder
  - rails g model notification date:date time:time reminder:references is\_sent:boolean is\_active:boolean
     rails db:migrate

# notifications - id - date - time - reminder\_id - is\_sent

- is\_active

created\_at

updated\_at

- Implementation of adding records in notification table
  - o On create of new reminder
  - o On edit of existing reminder

- It calculates all possible dates of reminder depending on start\_date , end\_date and relative day. Adds <u>one record each</u> for calculated dates.
- If a user edits a reminder, it deletes old records from the notifications table for that reminder, calculates new reminder dates and adds new records.
- On #create of Reminder
  - Calculates number of months
  - o For every month, it calculates a date
  - Creates an entry in notification table date = calculated date
- On #edit of Reminder
  - Deletes old notifications
  - Calculates number of months
  - o For every month, it calculates a date
  - Creates an entry in notification table date = calculated date
- On deleting reminder, it deletes all associated notifications
- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/509c0784
     20e0f9e057088ec80364ecd62e16c9d5
- Note
  - Notification table is created to separate out functionality of sending emails from main application
  - Column *Is\_active* is created, if in case developer decides to unflag old notifications instead of hard delete

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# 25 & 26 February 2022

### Send email for each notification

- Create the Mailer
  - o rails generate mailer Notification
- Implementation of ActionMailer
- Action Mailer Configuration for Gmail

4 ms ×3

### **Welcome to Scheduled Reminder Application**

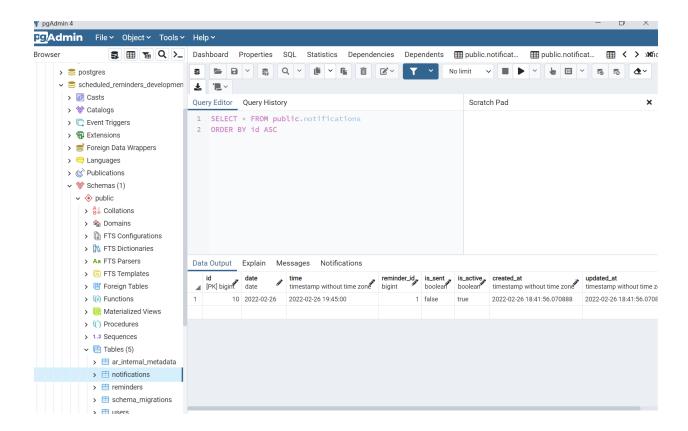
A small, simple Ruby on Rails application that sends monthly scheduled reminders to users

Editing Reminder
Title
Reminder for house rent
Body Do not forget to pay
house rent.
Time 19:45 🔘
Start date
26/02/2022
End date
17/03/2022
Relative Days
You can enter only one from below options.
1. Every th day of a month
2. 2 days before End of the month
3. ☐ Last day of the month
Update Reminder

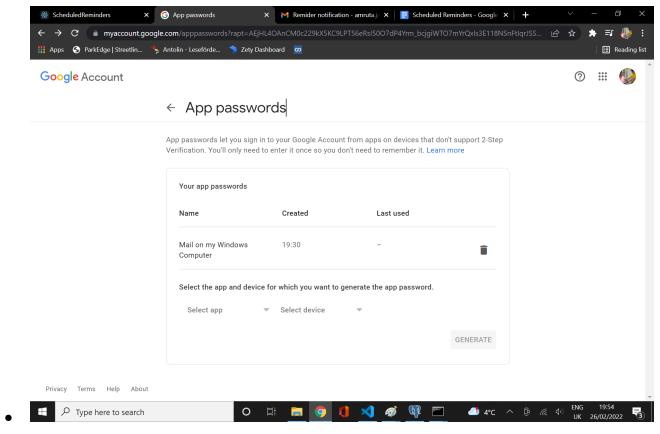
### **Welcome to Scheduled Reminder Application**

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Reminder was successfully updated.
Title: Reminder for house rent
<b>Body:</b> Do not forget to pay house rent.
Time: 2022-02-26 19:45:00 UTC
<b>Start date:</b> 2022-02-26
<b>End date:</b> 2022-03-17
Day of month:
Day before eom: 2
Last day month: false
Edit   Back
Logout



- Setup of Google account App password for Windows Mail
- <u>It's not my GMAIL account password.</u> For Action Mailer we need to create new App password through Gmail account,
- Please follow below link to create app password
  - https://support.google.com/accounts/answer/185833?hl=en
- This app password is created for a short time and temporarily. Once the Code Task
   Review is done, I will delete this password from my account.



- Run rake task in console
  - o rake send reminder email:my task

```
C:\Users\amrut\OneDrive\Desktop\Amruta\ScheduledReminders>rake send_reminder_email:my_task
"email sent"
C:\Users\amrut\OneDrive\Desktop\Amruta\ScheduledReminders>
```

User gets email notification for reminder on selected date and time



## Welcome to Scheduled Reminders Apllication, amruta.jadhav1@gmail.com

This is an email notification For a reminder Title: Reminder for house rent Body: Do not forget to pay house rent.

Thank you!

Reply

Forward

- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/d7513a73
     6c25f4b3ab8b6e605c2e7d6ebf51ac9d

### **User model Rspec**

• Add below code in Gemfile under development ENV

```
#Rspec
gem 'rspec-rails', '~> 5.0.0'
```

Add below code in Gemfile under test ENV

```
gem 'shoulda-matchers'
gem install shoulda-matchers -v 5.1.0

This Gem version is specially require to check

it { should
  validate_numericality_of(:day_before_eom).is_greater_than_or_e
  qual_to(1) }
```

- Generated rspec for User
  - o bundle install
  - o rails generate rspec:install
  - o rails db:migrate RAILS\_ENV=test
  - o rails generate rspec:model user

- Add Below code in spec/rails\_helper.rb
  - O RSpec.configure do |config|
  - O config.include(Shoulda::Matchers::ActiveModel, type: :model)
  - O config.include(Shoulda::Matchers::ActiveRecord, type: :model)
  - O End
- bundle exec rspec spec/models
- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/2bc7183d
     c4e9f6d75ae78e29549578d460ebd89a

# **27 February 2022**

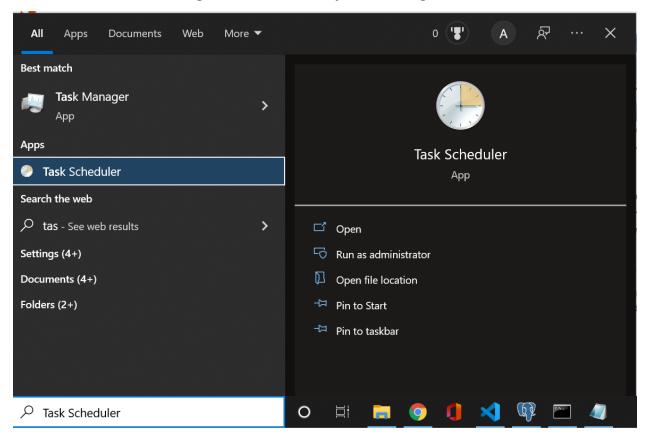
### **Reminder model Rspec**

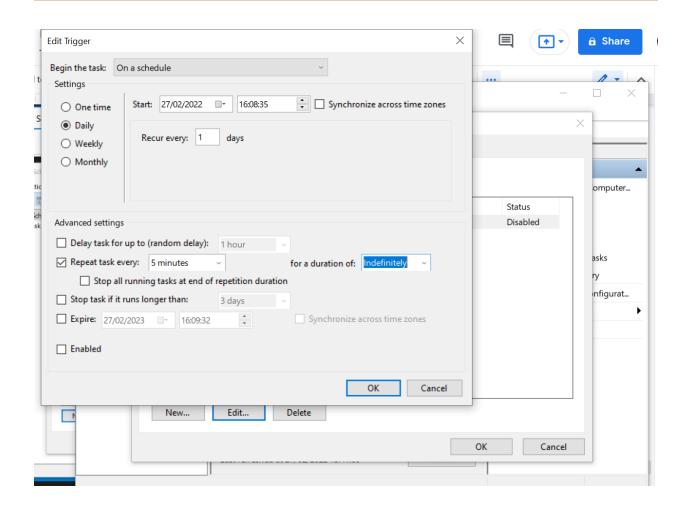
- Generated rspec for Reminder
  - o rails generate rspec:model reminder
  - o bundle exec rspec spec/models
- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/955fe073
     3c1c784b20bea4d23c9045e0d01a29d6

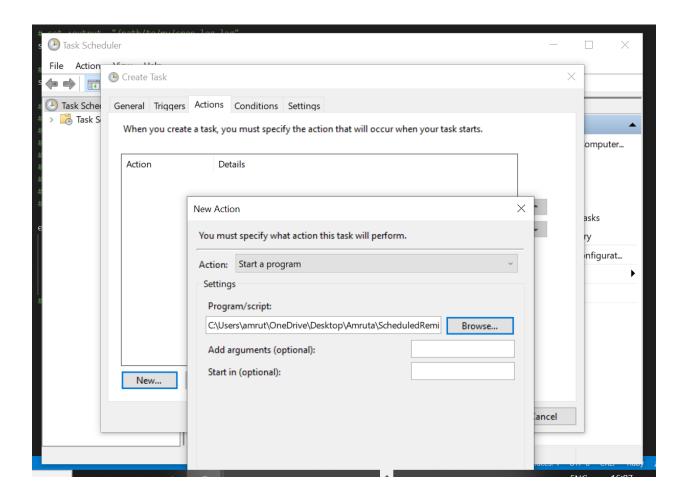
### Schedule a rake task to send reminder email with whenever gem

- Add whenever gem in GemFile
  - o gem 'whenever', require: falseo bundle instal
  - o bundle exec wheneverize .
- Add rake task in config/schedule.rb that will run once in every 5 minute
- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/b847f0f0 aed1bb9af1791efee86fe83ca396e17d
- Convert schedule file into cron syntax
  - O bundle exec whenever
- Set crontab
  - o whenever --update-crontab

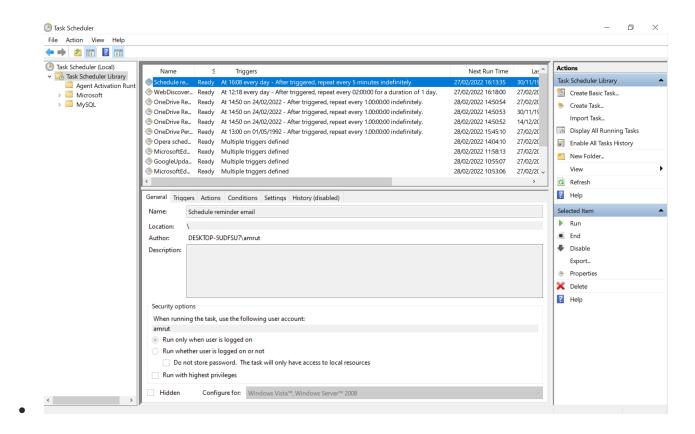
- Set crontab
  - the whenever gem only runs on \*nix systems (Linux, Mac OSX, BSD, ...) and not on windows.
- Or schedule it through Task Scheduler if you are using Windows







• Task scheduled in Windows



### 1 March 2022

### **Rspec**

- Session is not accessible in spec/requests
- To access session and check user authenticate before any action
  - user one has to write controller spec instead of requests spec
  - Tried to create spec/controller
    - rails g rspec:controller sessions
    - rails g rspec:controller users
    - gem 'rails-controller-testing'
    - bundle install
- Rails 6 does not create any controller rspec. It creates by default requests rspec which doesn't allow you to set a session.
- Tried same with test/controllers/sessions\_controller\_test.rb
  - It doesn't allow you to set a session.
  - Error : undefined method session' for nil:NilClass

- To write controller and integration test case (both inside test and spec) need to set session
- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/87
     4a9243c779637a9dea7c06a7b06be64df7da02

### **Created README file**

### 3 March 2022

### Invalid authentication error message

- Invalid authentication error message
  - If user enters incorrect email id/ password on login
  - If users does not enter email id or password on login

#### **Welcome to Scheduled Reminder Application**

A small, simple Ruby on Rails application that sends monthly scheduled reminders to users



- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/92 16a370b9743defa698861deee96ddbda4306b3

## Notification is sent flag

- After sending email notification set is\_sent to true
- Git commit
  - https://github.com/amrutapednekar/ScheduledReminders/commit/05 5a3de6f85689b42b511f6c0b0393ec78f80c20

# 4 & 7 March 2022

# Rspec

- o Created module to access session in test environment
- o Created separate route of session controller for test env
- o Reminder Rspec
- o Notifications Rspec
- o Run Rspec

bundle exec rspec spec