

1. Task description

You receive a task to create a new section for our dashboard.

In this section our customers will be able to view, add, edit and delete invoices. Invoices can be added by retrieving the amount from the connected bank account (a bank account must have been connected to be able to use the dashboard). Please read carefully the following user story and take a look at the simplified mockups.

1. Scenario: List of invoices (see Fig. 1)

Given I am on the dashboard

Then I see a list of invoices with date, title, amount, IBAN and edit button

And I see the "Add invoice" button

2. Scenario: Open add invoice dialog

Given I am on the dashboard

When I click the "Add invoice" button

Then I see the Invoice Dialog

3. Scenario: Enter invoice information

Given /Open add invoice dialog/

Then I can see the Invoice Information section

And I can enter the date and the title

And I see the "Retrieve amount from bank account" toggle

And the toggle is in the OFF state

And I see the amount field

4. Scenario: Invoice without bank transfer (see Fig. 2)

Given /Enter invoice information/

When I enter the amount

Then the Done button becomes active

When I click the Done button

Then the dialog closes

And I can see the created invoice on the list

5. Scenario: Invoice with bank transfer (see Fig. 3)

Given /Enter invoice information/

When I switch the "Retrieve amount from bank account" toggle to the ON state

Then I can no longer see the amount field

And I can see a new payments section

And the Done button turns into Next button

When I click the Next button

Then I can see a IBAN search field

And I see the deactivated Done button

When I type in an IBAN into the search field

Then I can see a list of payments from my bank account with this IBAN

When I select a payment

Then the Done button becomes available

When I click the Done button

Then the dialog closes

And an invoice is created with the IBAN of the payment

And the amount of the invoice is populated with the amount of the payment

And I can see the created invoice on the list

6. Scenario: Edit invoice

Given /List of invoices/

When I click the Edit button next to an invoice

Then I can see the Invoice Dialog

And the dialog is prefilled with the data from the invoice

And I can edit the invoice data

When I click the Done button

Then the dialog closes

And I can see the updated invoice on the list

7. Scenario: Mobile behaviour (see Fig. 4)

Given /Open add invoice dialog/

And I am on a Mobile device

Then I can see an accordion list with all sections

And each entry field (date, title, amount etc.) has its own section

When I click on a section on the accordion

Then the section expands

And I can change the value in the section

When I click again on the expanded accordion section

Then the section collapses

When I click Done

Then the dialog closes

And I see the list of invoices

2. Simple mockups

Invoices list: Add new invoice

2018-01-01	Rent January	500 EUR	IBAN: DE-01-1234...	Edit	Delete
2018-02-03	Rent February	500 EUR	IBAN: DE-01-1234...	Edit	Delete
2018-03-02	Rent March	500 EUR	IBAN: DE-01-1234...	Edit	Delete

Fig 1. Invoices list

Invoice Dialog X

Invoice information

Payments

Date: 2018-01-01 ▼

Subject: Rent January

Retrieve amount from bank account ☐

Amount: 500 EUR

Done

Fig 2. Invoice without bank transfer

Invoice Dialog X

Invoice information

Payments

Search IBAN: DE-01-0000-2233-33222-10

Found bank transfers

Rent Decemb.	490 EUR	DE-01-0000-2233-33222-10
Rent January	500 EUR	DE-01-0000-2233-33222-10
Rent Feb	490 EUR	DE-01-0000-2233-33222-10

Done

Fig 3. Invoice with bank transfer

Invoice Dialog X

Date: 2018-01-08 ▼

Subject: ▲

Enter subject: Rent January

Amount: 500 EUR ▼

Done

Fig 4. Mobile behaviour

3. Your goal

Your goal is to show us how you would design this feature.
Keep in mind that we don't expect any particular solution.

We believe it's efficient to have time to think about the problems (and to do this in a comfortable environment). If you feel that you need additional data, then please make the necessary assumptions on your own and share them during the interview process. If you believe that it indeed requires clarification, then write them down in a reply email. Feel free to omit any details you find redundant and rather focus on the big picture.

Please present your design in any way you find convenient and/or effective.
It can be a diagram, plain text, pseudo-code, Angular or React code, UML or even a video where you share your ideas. If you choose to write code, we don't require the project to compile.

A successful submission should elaborate on the following topics:

- 1. Component architecture**
Present how you would structure the components for this feature. Define responsibilities and relationships between them.
- 2. State management**
Define the most important aspects of the store, actions and effects.
- 3. Responsiveness**
The behaviour of the dialog is distinct for desktop and mobile devices. E.g. according to the mobile behaviour scenario, sections are grouped together on desktop and separate on mobile. How do you handle this?
- 4. Testing strategy**
How can you effectively test such a feature?
- 5. User Experience and Design**
What are the shortcomings of this design in your opinion?
If you feel fond of the UI building aspect of Frontend development feel free to impress us with your skills.
- 6. Application architecture**
How would you organize the code for this feature? What potential challenges would you expect if this feature were to be used as part of a large application?

4. Next steps

We consider that it will take you up to 4 hours to complete this task. Therefore we expect your answer in up to 5 days after you receive this email. Please share the results as a response to the email you received (it can be a link to GitHub, Google Drive document etc.).

However, if you have a project (at least as complex as this task) on GitHub with a problem statement, then you can share it with us as well.

Don't hesitate to ask in case you have any questions.