

Secret Escapes Coding Challenge

Exercise 3- Simple payment app

1. Description

Your task is to implement a simple payment application using Grails 1.3.7 or your preferred framework/version (previously agreed with Secret Escapes). The problem is described below using a UAT which is the standard format for documenting requirements at Secret Escapes.

Assessment criteria

The exercise will be assessed based on the following criteria:

- UAT acceptance criteria (see Section 2.)
- Domain modeling
- Separation of concerns
- Testing
- Code quality i.e. clean, simple, readable

The following are not a part of the assessment criteria:

- Production quality
- Security

Estimated effort

It should be possible to complete the exercise to a satisfactory level in 3 hours.

Submitting your solution

Please submit your solution as a .zip file or as a link to a public repository. Provide all instructions necessary to run your application and to run the tests.

2. UAT - Account transfer

Description

As a user I want to make transfers from one account to another so that I can make payments to others.

Problem in context

Transferring sums between accounts is a common task in many financial organisations. The purpose of this story is to create this functionality as part of a simple payment system.

Assumptions

- Accounts have a name, balance and email address
- All accounts have a starting balance of £200
- There are no overdrafts
- The system has no security or user management functionality

Acceptance criteria

No.	Given	When	Then
1	I visit the Transaction screen	I view the page	I see a list of all the accounts in the system and their balances
2	There is a list of accounts on the transaction screen	I select an account	I see all transactions for the account that I selected
3	I visit the pay screen	I view the page	There's a form to transfer a sum from one account to another. The form contains the following fields: From account, To account, Amount
4	There is a transfer form on the pay screen	I select a From account, a different To account and specify an amount less than or equal to the balance of the From account and submit the form	The balance of the From account decreases by the amount specified. The balance of the To account increases

			<p>by the amount specified.</p> <p>An email is sent to both account holders confirming the transfer.</p> <p>I am informed that the transfer was successful.</p>
5	There is a transfer form on the pay screen	I select a From account, a different To account and specify an amount greater than the balance of the From account and submit the form	<p>I am informed that the transaction was not successful.</p> <p>The balance of the From account remains unchanged.</p> <p>The balance of the To account remains unchanged..</p> <p>No email is sent to either account.</p>

3. Supporting Information

Tips

- Use the greenmail plugin for managing and testing emails
- Use Bootstrap.groovy to create default accounts

GSP snippets

Pay.gsp	Transactions.gsp
<pre><html> <head> <title>Pay Some Person</title> <meta name="layout" content="main" /> </head> <body> [errors go here] <div> <h2>Pay</h2>
 From: [from Account.list()] <---- dropdown
 To: [from Account.list()] <---- dropdown
 Amount: [text input]
 [submit] </div> </body> </html></pre>	<pre><html> <head> <title>See transactions</title> <meta name="layout" content="main" /> </head> <body> <div> <h2>Pay</h2>
 [errors go here] Person: [from Account.list()] <---- dropdown
 [submit] ----- <div>Balance: [amount]</div> <div>some awesome table with transaction amounts</div> </div> </body> </html></pre>