Notes

- If we want to add actual email, we can use SendGrid:
 - Account: http://sendgrid.com/developers (http://sendgrid.com/developers)
 - Sample: https://github.com/tbarn/basicEmail (https://github.com/tbarn/basicEmail)
- If we want actual \$, we can use:
 - Stripe: https://stripe.com/ca (https://stripe.com/ca)
 - Braintree: https://www.braintreepayments.com/developers (https://www.braintreepayments.com/developers)
 - PayPal: https://developer.paypal.com/docs/api/ (https://developer.paypal.com/docs/api/)
- Need to check for errors and produce messages
- I recommend using bootstrap for front-end and modals to flash error messages

Clerk

- Add new borrower
 - 1. Get information
- Checkout items borrowed by someone
 - 1. Provide card number
 - 2. Provide call numbers
 - 3. Check if account is valid
 - which involves...
 - 4. Check if items are available
 - 5. Create the borrowing records for each
 - 6. Print a list of items and due dates
- Process a return
 - 1. Get catalogue number (call number?)
 - 2. Determine borrower
 - 3. Record it is in
 - I feel like this should be the last step in this process...
 - 4. If overdue
 - Fine the borrower
 - 5. If a hold request exists
 - Put item on hold
 - Email borrower who requested
- Report: overdue items
 - 1. Display a list of overdue items and their borrowers
 - 2. Can email any or all of them

Borrower

- Search for books
 - 1. Enter term(s):
 - title(s?)
 - author(s)
 - subject(s)
 - 2. Return list of books and copies in and out
- Place hold request
 - 1. Search
 - 2. If out
 - Click button to hold
- Check account
 - 1. Display items currently borrowed
 - 2. Display hold requests placed
 - 3. Display outstanding fines
- Pay a fine
 - 1. Enter in \$ to pay
 - 2. Enter in CC #
 - 3. Pay

Librarian

- Add new book or copy of book
 - 1. Get information
 - 2. If exists
 - Add a copy
 - Should imitate the search feature?
- Report: checked out items
 - 1. Display a list of items that are checked out, out date, due date
 - 2. Flag items that are overdue
 - Is this a visual thing or system thing that sets a status?
 - 3. Order by call number
 - 4. Filter by subject
- Report: most popular items in a year
 - 1. Enter year
 - 2. Enter number n
 - 3. Display a list of items that were borrowed
 - Ordered by borrowed count
 - Filtered by year
 - Limited by n

Deliverables

- A cover page with team info
- A brief introduction to the system, a brief user manual, and a list of assumptions made during implementation
- The file with the code for the creation of the tables
- The files with the code for the operations, the transactions, and interface