Intern Coding Challenge

Zendesk Ticket Viewer

Zendesk is a customer service tool that allows the creation and management of support tickets. Your company needs you to build a Ticket Viewer that will:

- Connect to the Zendesk API
- Request all the tickets for your account
- Display them in a list
- Display individual ticket details
- Page through tickets when more than 25 are returned

Non-functional requirements:

- Include a README with installation and usage instructions
- The UI can be browser-based or CLI (see example output below). You will be judged equally for either choice.
- The amount of data you display in the ticket list view and the single ticket view is up to you
- How you format and display the ticket data is up to you, just ensure it is easy to read
- The Ticket Viewer should handle the API being unavailable
- We need to see you write some unit tests for your application in a standard unit testing framework for your language of choice
- Submissions will be accepted up until **1:00pm GMT on November 29th, 2022**. Any submissions or commits made after this time will be ignored. Submission can be done either:
    - *This is the preferred method of submission*. Via Github, Google Drive or Dropbox - email the link to coding-challenge@zendesk.com. Ensure the repo is public. Meaningful commits will be looked upon favourably.
    - Via email - zip up the project and email to coding-challenge@zendesk.com
    - Please be aware: Gmail blocks the following file types (so please use the above):
        - .ADE, .ADP, .BAT, .CHM, .CMD, .COM, .CPL, .DLL, .DMG, .EXE, .HTA, .INS, .ISP, .JAR, .JS, .JSE, .LIB, .LNK, .MDE, .MSC, .MSI, .MSP, .MST, .NSH .PIF, .SCR, .SCT, .SHB, .SYS, .VB, .VBE, .VBS, .VXD, .WSC, .WSF, .WSH

Criteria for Assessment:

- Meets requirements:
    - No extra features are added.
    - All required features have been attempted.
- Displays some knowledge of application design:
    - Separation of concerns.

  - Simplicity.
- Handles basic errors:
  - Displays a friendly error message if the API is unavailable or the response is invalid.
  - Tells the user something is wrong if there is a program error.
- Includes tests.
  - Testability: code is implemented in a testable way
  - Unit tests: individual units of work are tested in isolation. You must use a standard unit test framework for your language of choice.
  - Coverage: your unit tests cover the code you created
- UI is easy to use and displays ticket results clearly.
  - Presents a good understanding of the integration with the Zendesk API and how to surface that data to the end-user
- Code demonstrates:
  - Consistency.
  - Adherence to common standards.

Getting Started

- Sign up for a free trial with Zendesk: https://www.zendesk.com/register. You'll need to pick an account name. Take note of this, you'll need it later. **Please keep your log in credentials confidential, they shouldn't ever be posted anywhere externally (such as GitHub) and don't check in files that can name your credentials.**
  - In step 3, you'll be asked for your company name. Please put "Zendesk Coding Challenge" as the company.
  - In creating your account, please use the prefix "zcc" in front of whichever subdomain name you choose. For example, if you were to use the subdomain students.zendesk.com, please name it as zccstudents.zendesk.com.
- Take a look at the Zendesk Ticket API Documentation: https://developer.zendesk.com/rest_api/docs. You'll find instructions on how to connect to the API and make requests for tickets.
- Two simple steps to create test Tickets
  - Copy the JSON here, and save it to a file called tickets.json on your computer.
  - Use the cURL command below to POST the in this file to your new Zendesk account. You'll need to replace the , {email}, and {password} placeholders with the relevant details for your own Zendesk account. If you're not familiar with cURL, feel free to use whatever means you like to make the request. Postman is an easy option.

```
curl https://{subdomain}.zendesk.com/api/v2/imports/tickets/create_many.json -v -u {email_address}:{password} -X POST -d @tickets.json -H "Content-Type: application/json"
```

Gotchas:

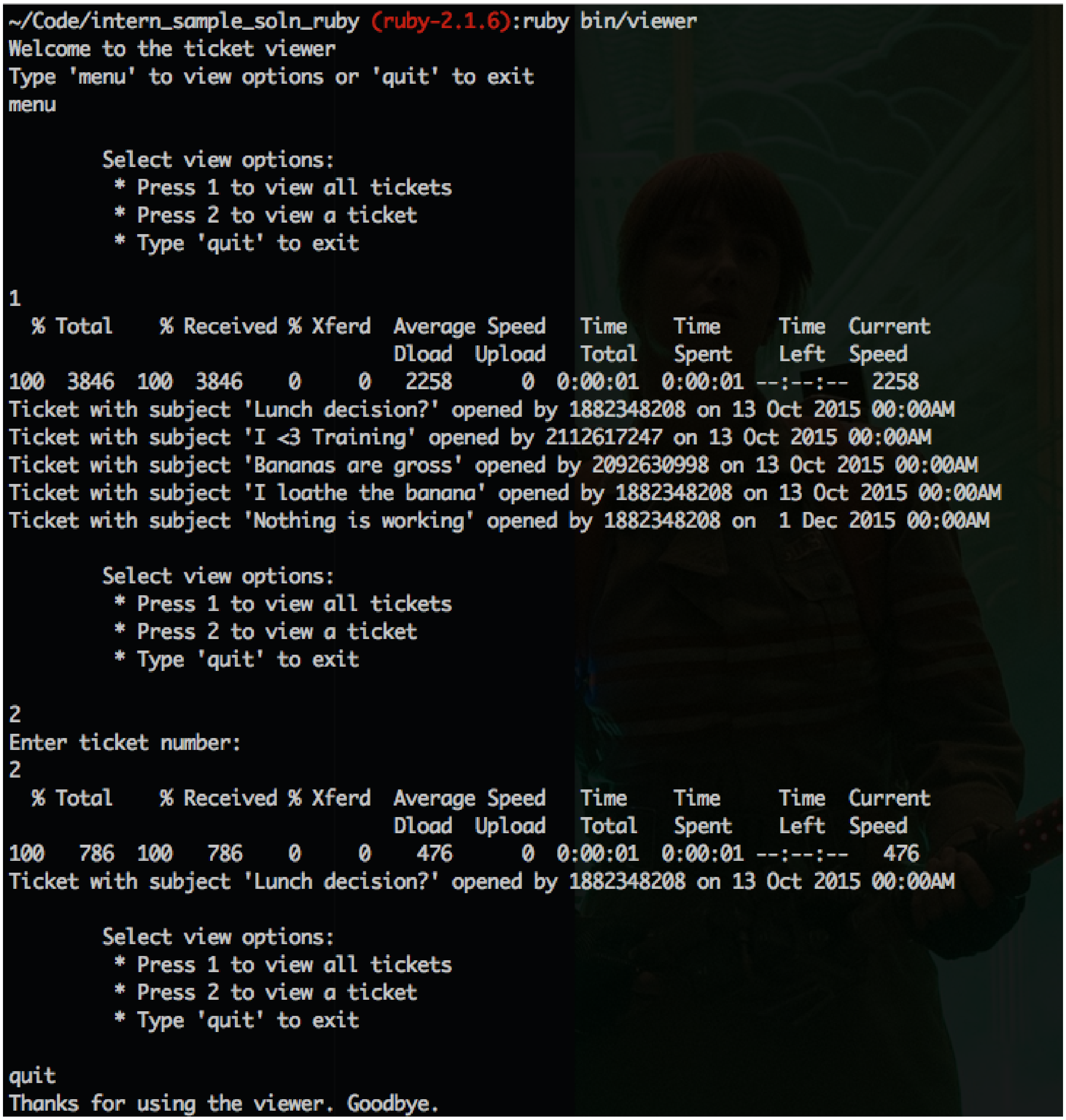
- The cURL command expects that a tickets.json file will be in the current working directory when the command is run.
- When called, the Ticket Import API will kick off a job that may take some time to complete. You can call the Job Status API to get the current status of the job.
- You can find additional information about the Ticket Import API here.
- **Do not use Javascript** in the browser to fetch tickets (running on Node is fine). You won't be able to successfully complete a GET request as we prevent cross-domain requests.
- Remember that even though the response comes back as JSON format it is still just a string and needs to be parsed to be of any use to you.
- Here's two documents on authentication for your reference, look here and here.

That's it! Good luck with the challenge.

Sample Output

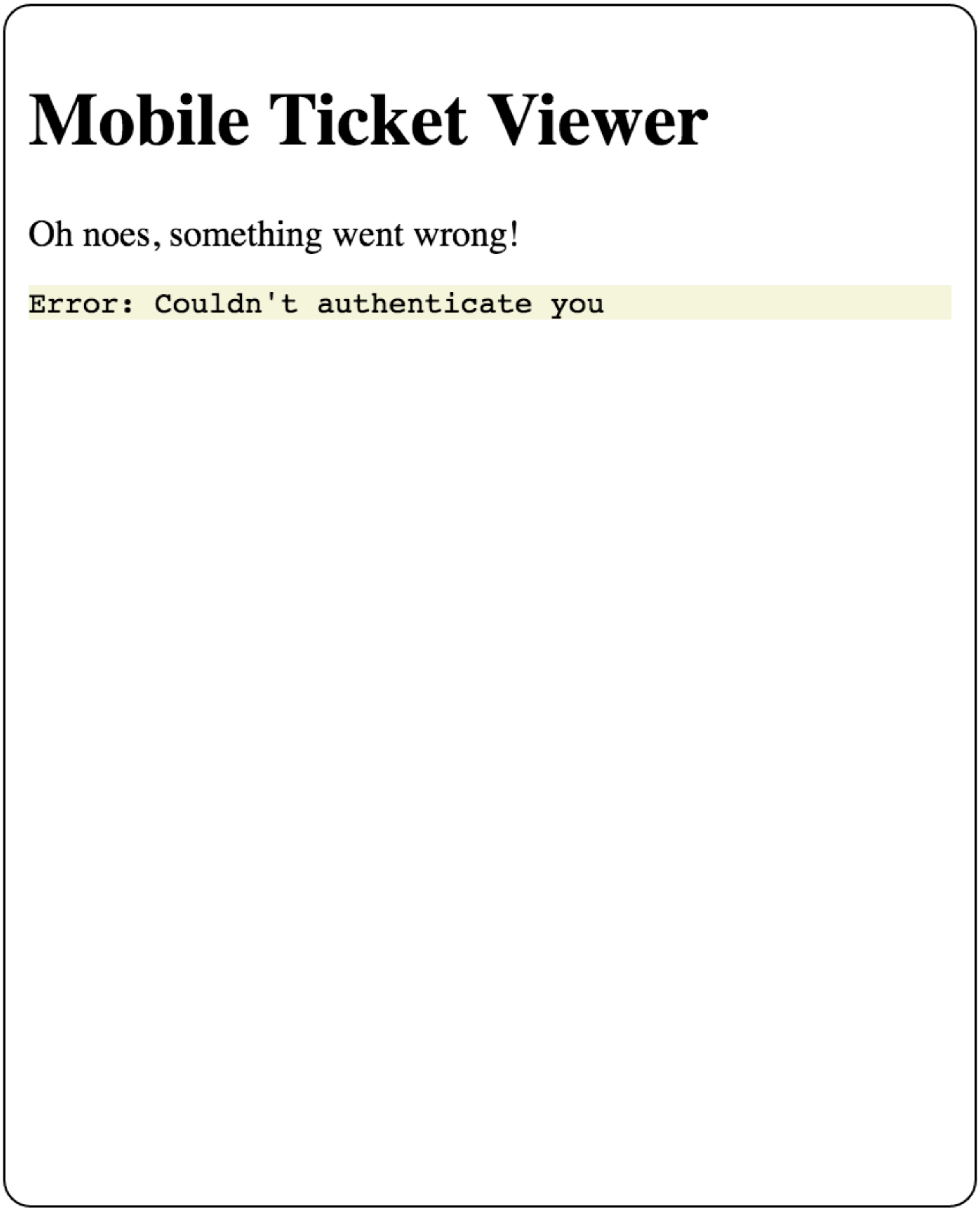
Note: These are really basic samples only and not to be taken as prescriptive. We encourage you to format the ticket output in your own way.

Sample CLI



```
~/Code/intern_sample_soln_ruby (ruby-2.1.6):ruby bin/viewer
Welcome to the ticket viewer
Type 'menu' to view options or 'quit' to exit
menu

        Select view options:
         * Press 1 to view all tickets
         * Press 2 to view a ticket
         * Type 'quit' to exit

1
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  3846  100  3846    0     0   2258      0  0:00:01  0:00:01 --:--:--  2258
Ticket with subject 'Lunch decision?' opened by 1882348208 on 13 Oct 2015 00:00AM
Ticket with subject 'I <3 Training' opened by 2112617247 on 13 Oct 2015 00:00AM
Ticket with subject 'Bananas are gross' opened by 2092630998 on 13 Oct 2015 00:00AM
Ticket with subject 'I loathe the banana' opened by 1882348208 on 13 Oct 2015 00:00AM
Ticket with subject 'Nothing is working' opened by 1882348208 on  1 Dec 2015 00:00AM

        Select view options:
         * Press 1 to view all tickets
         * Press 2 to view a ticket
         * Type 'quit' to exit

2
Enter ticket number:
2
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   786  100   786    0     0    476      0  0:00:01  0:00:01 --:--:--   476
Ticket with subject 'Lunch decision?' opened by 1882348208 on 13 Oct 2015 00:00AM

        Select view options:
         * Press 1 to view all tickets
         * Press 2 to view a ticket
         * Type 'quit' to exit

quit
Thanks for using the viewer. Goodbye.
```

Sample Static Website



Mobile Ticket Viewer

Oh noes, something went wrong!

```
Error: Couldn't authenticate you
```

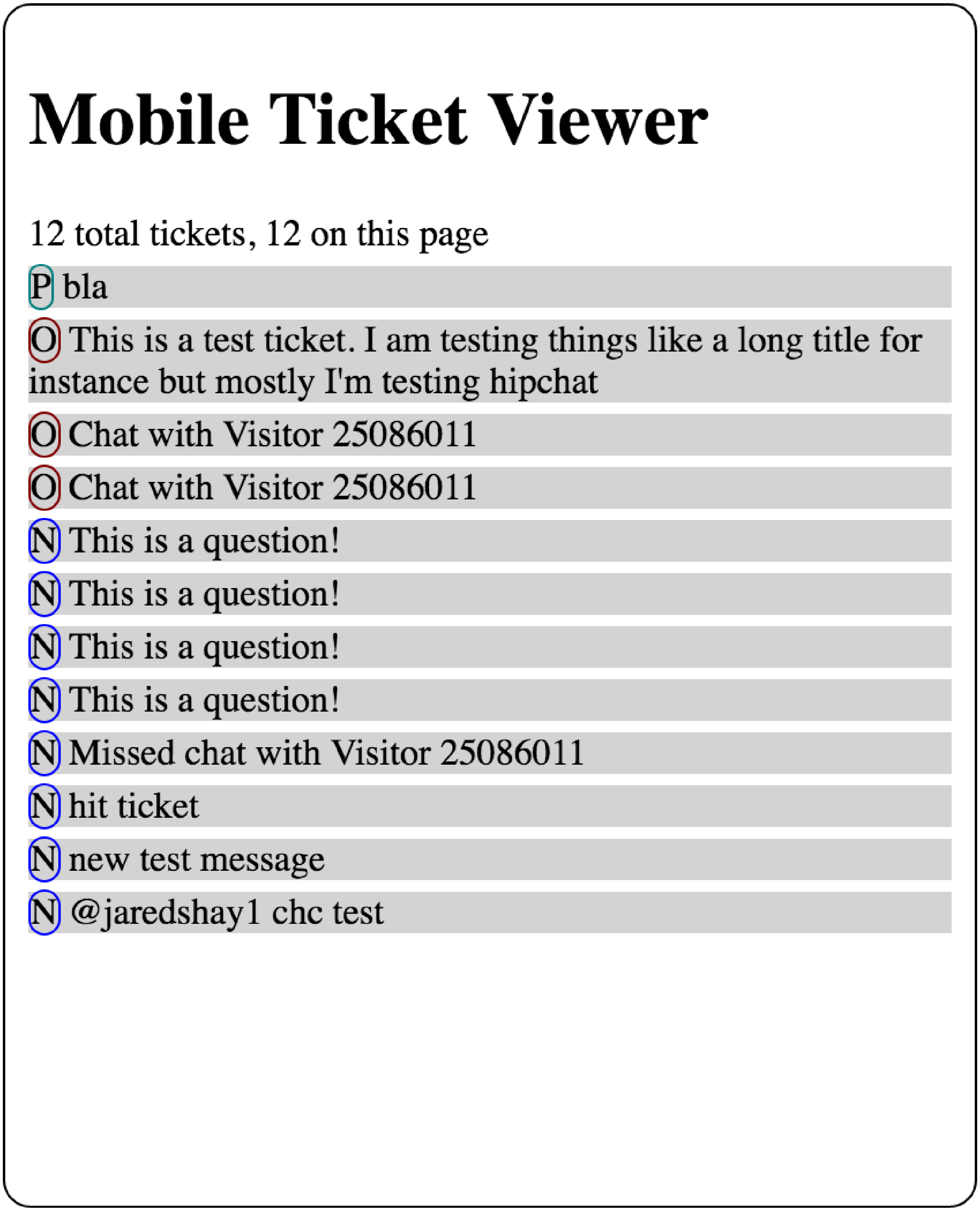
Mobile Ticket Viewer

Requester: Adam Malcontenti-Wilson

This is a test ticket. I am testing things like a long title for instance but mostly I'm testing hipchat

my printer is non-existent and sucked into a black hole

Back to all tickets



Mobile Ticket Viewer

12 total tickets, 12 on this page

P bla

O This is a test ticket. I am testing things like a long title for instance but mostly I'm testing hipchat

O Chat with Visitor 25086011

O Chat with Visitor 25086011

N This is a question!

N This is a question!

N This is a question!

N This is a question!

N Missed chat with Visitor 25086011

N hit ticket

N new test message

N @jaredshay1 chc test