



## Zendesk Coding Challenge

### OVERVIEW

Using the provided data (`tickets.json` and `users.json` and `organization.json`) write a simple command line application to search the data and return the results in a human readable format.

Feel free to use libraries or roll your own code as you see fit. Where the data exists, values from any related entities should be included in the results. The user should be able to search on any field, full value matching is fine (e.g. “mar” won’t return “mary”). The user should also be able to search for empty values, e.g. where description is empty.

Search can get pretty complicated pretty easily, we just want to see that you can code a basic search application.

### EVALUATION CRITERIA

We will look at your project and assess it for:

1. Extensibility - separation of concerns.
2. Simplicity - aim for the simplest solution that gets the job done whilst remaining readable, extensible and testable.
3. Test Coverage - breaking changes should break your tests.
4. Performance - should gracefully handle a significant increase in amount of data provided (e.g 10000+ users).
5. Robustness - should handle and report errors.

If you have any questions about this criteria please ask.

### SPECIFICATIONS

- Use the language in which you are strongest.
- Include a README with (accurate) usage instructions.

## **SUBMISSION**

Github is the preferred option (a public repo is fine) but we will also accept a .zip file if necessary. Email your solution to [cthilgen@zendesk.com](mailto:cthilgen@zendesk.com).

## **HINT**

One of the assessors wrote [How To Pass A Coding Test](#).

## SAMPLE OUTPUT

*Note: This is output is not prescriptive, in fact we encourage you to do better.*

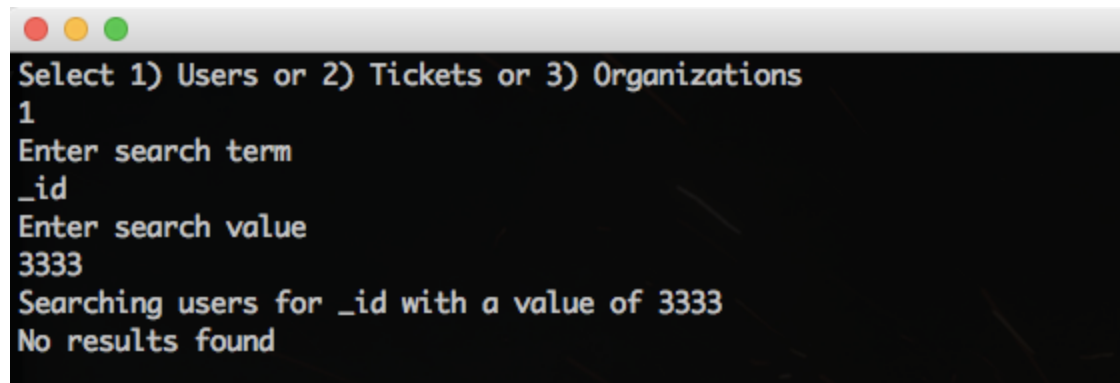
### CLI - Display Results

```
1. ruby
Welcome to Zendesk Search
Type 'quit' to exit at any time, Press 'Enter' to continue

Select search options:
* Press 1 to search Zendesk
* Press 2 to view a list of searchable fields
* Type 'quit' to exit

1
Select 1) Users or 2) Tickets or 3) Organizations
1
Enter search term
_id
Enter search value
71
_id 71
url http://initech.zendesk.com/api/v2/users/71.json
external_id c972bb41-94aa-4f20-bc93-e63dbfe8d9ca
name Prince Hinton
alias Miss Dana
created_at 2016-04-18T11:05:43 -10:00
active true
verified false
shared false
locale zh-CN
timezone Samoa
last_login_at 2013-05-01T01:18:48 -10:00
email danahinton@flotonic.com
phone 9064-433-892
signature Don't Worry Be Happy!
organization_id 121
tags ["Davenport", "Cherokee", "Summertown", "Clinton"]
suspended false
role agent
organization_name Hotcakes
ticket_0 A Catastrophe in Micronesia
ticket_1 A Drama in Wallis and Futuna Islands
ticket_2 A Drama in Australia
```

## CLI - No Search Result

A terminal window with a dark background and light-colored text. The window has a title bar with three colored buttons (red, yellow, green) on the left. The text inside the terminal shows a sequence of prompts and user input. The prompts are "Select 1) Users or 2) Tickets or 3) Organizations", "Enter search term", and "Enter search value". The user input is "1", "\_id", and "3333". The terminal then displays the message "Searching users for \_id with a value of 3333" and finally "No results found".

```
Select 1) Users or 2) Tickets or 3) Organizations
1
Enter search term
_id
Enter search value
3333
Searching users for _id with a value of 3333
No results found
```

## CLI - List Searchable Fields

```
-----  
Search Users with  
_id  
url  
external_id  
name  
alias  
created_at  
active  
verified  
shared  
locale  
timezone  
last_login_at  
email  
phone  
signature  
organization_id  
tags  
suspended  
role  
-----  
Search Tickets with  
_id  
url  
external_id  
created_at  
type  
subject  
description  
priority  
status  
recipient  
submitter_id  
assignee_id  
organization_id  
tags  
has_incidents  
due_at  
via  
requester_id  
-----  
Search Organizations with  
_id  
url  
external_id  
name  
domain_names  
created_at  
details  
shared_tickets  
tags
```