What is a class instance variable?

**General Questions** 

What are the looping structures available in Ruby?

**General Questions** 

What is the use of super?

**General Questions** 

Should we prefer Ruby over other programming languages?

If yes why?

What are the operating systems supported by Ruby?

**General Questions** 

What are the rules and conventions to be followed in Ruby for naming a method?

**General Questions** 

What is the use of :var in Ruby?

**General Questions** 

How does nil and false differ?

What is the use of destructive method?

Configuration

Which items do you normally place under version control?

# Configuration

How can you make sure that team members know who changed what in a software project?

### Configuration

Do you know the differences between tags and branches? When do you use which?

## Configuration

How would you manage changes to technical documentation, like the architecture of a product?

## Configuration

Which tools do you need to manage the state of all digital information in a project? Which tools do you like best?

# Configuration

What is the difference between managing changes in text files vs. managing changes in binary files?

#### To Interviewer

How would you describe the general culture of the company? or How would you describe the general culture of the team?

To Interviewer

Why did you choose this company?

To Interviewer

What if any are the forms of mentoring, coaching or training resources provided

To Interviewer

What are some of the biggest challenges your team/ department/company are currently facing?

To Interviewer

How do you evaluate employee performance?

#### To Interviewer

Who would I be reporting to directly?

#### To Interviewer

What is the typical timeframe for making hiring decisions?

#### To Interviewer

What's your stack? Are major programming changes anticipated in the near future?

#### To Interviewer

If your team does not hire someone by then will it slow the project down or change anything for the team?

### To Interviewer

Are major programming changes anticipated in the near future?

#### To Interviewer

May I contact you if I think of more questions? If yes; what is the best method email or phone? If no; who should I contact?

#### Maintenance

How do you find an error in a large file with code that you cannot step through?

#### Maintenance

How can you make sure that changes in code will not affect any other parts of the product?

#### Maintenance

How do you create technical documentation for your products?

#### Maintenance

What measures have you taken to make your software products more easily maintainable?

#### Maintenance

How can you debug a system in a production environment, while it is being used?

#### Maintenance

Do you know what load balancing is? Can you name different types of load balancing?

#### Maintenance

Can you name reasons why maintenance of software is the biggest/most expensive part of an application's life cycle?

## **Testing**

Can you tell me something that you have learned about testing and quality assurance in the last 9 weeks?

# **Testing**

What types of problems have you encountered most often in your products after deployment?

### **Testing**

Which tools are essential to you for testing the quality of your code?

# **Testing**

Do you know what a regression test is? How do you verify that new changes have not broken existing features?

#### **Data Structures**

How would you store the value of a color in a database, as efficiently as possible?

#### **Data Structures**

What is the difference between a queue and a stack?

#### **Data Structures**

What is the number 21 in binary format? And in hex?

### **Data Structures**

What is the last thing you learned about data structures from a book, magazine or web site?

#### **Data Structures**

How would you implement the structure of the NYC underground subway in a computer's memory?

### **Data Structures**

Can you name some different text file formats for storing unicode characters?

### Algorithms

How do you find out if a number is a power of 2?
And how do you know if it is an odd number?

# Algorithms

How do you find the middle item in a linked list?

## **Algorithms**

How would you change the format of all the phone numbers in 10,000 static html web pages?

# Algorithms

Can you name an example of a recursive solution that you created?

### Algorithms

Which is faster: finding an item in a hashtable or in a sorted list?

## Algorithms

What is the last thing you learned about algorithms from a book, magazine or web site?

## **Algorithms**

How would you write a function to reverse a string? And can you do that without a temporary string?

# **Algorithms**

In an array with integers between 1 and 1,000,000 one value is in the array twice. How do you determine which one?

### Construction

Can you describe the process you use for writing a piece of code, from requirements to delivery?

### Construction

Can you name examples of anticipating changing requirements in your code?

#### Construction

How do you make sure that your code is both safe and fast?

### Construction

Apart from the IDE, which other favorite tools do you use that you think are essential to you?

### Construction

What do you care about most when reviewing somebody else's code?

#### Construction

How do you make sure that your code can handle different kinds of error situations?

## **Technical Design**

How do you manage conflicts in a web application when different people are editing the same data?

# Technical Design

Do you know about design patterns? Which design patterns have you used, and in what situations?

### Technical Design

What kinds of diagrams have you used in designing parts of architecture, or a technical design?

# Technical Design

Can you name different measures to guarantee correctness and robustness of data in architecture?

## **Technical Design**

How would you model user authorization, user profiles and permissions in a database?

# Technical Design

How would you model the animal kingdom (with species and their behavior) as a class system?

### **Functional Design**

How can you reduce the user's perception of waiting when some functions take a lot of time?

# **Functional Design**

Which controls would you use when a user must select multiple items from a big list, in a minimal amount of space?

# **Functional Design**

Can you name different measures to guarantee correctness of data entry?

# Functional Design

Can you name different techniques for prototyping an application?

## Functional Design

Can you name examples of how an application can anticipate user behavior?

# Functional Design

Can you name different ways of designing access to a large and complex list of features?

# **Functional Design**

How would you design editing twenty fields for a list of 10 items?

And editing 3 fields for a list of 1000 items?

# **Functional Design**

What is the problem of using different colors when highlighting pieces of a text?

## **Functional Design**

Can you name some limitations of a web environment vs. Windows environments?

### Cultural

What are your interests outside of work?

### Cultural

What is something almost no one else agrees with you on?

### Cultural

How does your bootcamp education differ from a Computer Science degree?

### Cultural

What contributions have you made to the tech community recently?

### Cultural

What is something you can teach your coworkers (tech or non-tech)?

### Cultural

Do you have a purpose greater than yourself? If so, what?

## Cultural

What's your current salary?

### Cultural

What are your salary expectations?

### Construction

How would you create an email template format?

### Construction

How would you reformat a page with CSS alone?

# Functional Design

How would you reduce page load times?

# Challenge

Take an array with duplicate entries, return an array with unique entries.

# Challenge

Design/architect a black jack game.

# Challenge

Design/architect a url shortener.

# Technical Design

How can you increase page load times?

# Challenge

Code a word processor using mongo and redid

# Challenge

Code a dynamic calendar

# Challenge

Design the database for a simple one-to-many relationship along with the models

# Challenge

Implement some enumerable in Ruby and JavaScript

# **Testing**

Why is testing important?

Explain how promises create patterns for asynchronous programming?

#### **General Questions**

Write a class to generate the Fibonacci sequence and write tests for it in RSpec.

### **General Questions**

Write a program that could iterate through lockers opening and closing them (Basically a loop within a loop).

### **General Questions**

How would you use css3 to round the corners in a square div?

What is a selector?

**General Questions** 

What is the difference between margin and padding?

### **General Questions**

What happens behind the scenes when you type in the url of your Rails app in the browser?

### **General Questions**

Walk me through how you'd make up a url shortener app, including how the database would be set up?

How would you write an algorithm that takes two strings of equal length and determines whether one is an anagram of the other?

**General Questions** 

Explain Big O Notation.

**General Questions** 

Explain prototyping in Javascript.

**General Questions** 

What happens when you say: User.where(name: "Erin)

What is REST?

**General Questions** 

What is MVC

**General Questions** 

How would you create a Twitter clone?

**General Questions** 

Explain how to create a CSS box model and positioning types?

General Questions  Explain how Javascript closures work.	