

Editor

Preview

Please take a printout of this file and bring it with you

Welcome to the RedCarpet internship Bootcamp

****WARNING:** This is a hard time-limited program. Your performance in this program will decide the projects assigned to you. There are no exceptions. ******

If you screw up the Bootcamp, it is very likely that you wont be able to deal with the level of sophistication and complexity that our production code will demand.

The bootcamp is designed to achieve 3 goals:

1. Eliminate fear of reading code - writing code is very easy. Reading code is very hard. The best programmers in the world can read code fast ...not write it (like Jeff Dean and Sanjay Ghemawat at Google (<https://www.newyorker.com/magazine/2018/12/10/the-friendship-that-made-google-huge>)) We will fix this by working on different programming languages and frameworks for **everyone** ... even if that is not your main project area. Meaning - you will work on Android/Kotlin, Javascript/Reactjs, Postgresql/SQL and (Python/Flask or Python/Pandas).
2. Learning to debate/disagree and align/commit with colleagues is a first order skill. You will write a Memo (<https://slab.com/blog/jeff-bezos-writing-management-strategy/>) on a topic and present it (by speaking) to your mentor in person.
3. Consistency - we will achieve hard standards of code consistency. Including expectation of IDE setup, git pull requests, etc.
4. Strong career achievement - The best companies in the world prefer an Achievement data (<https://www.businessinsider.in/A-head-recruiter-at-Amazon-says-the-best-resumes-are-data-based-and-theres-an-easy-formula-you-can-follow/articleshow/65235908.cms>) based criteria for selecting candidates for jobs. Your college just gives you rote skills. You will build your achievements here.

Work culture at RedCarpet:

- **Ownership** - If you are given a task (which might be as trivial as sending an email), make sure you do it... or you come and tell us that you were not able to do it. **Dont** silently ignore it. You are now a valuable member of one of the most disruptive startups in India. Take responsibility.
- **Hands on & Low Ego** - As founders, we have still swept floors and cleaned generators using mop cloths. Anything from writing testcases to making phone calls is [your job]. Make it happen. We dont believe in caste system around work.
- **Jugaad** - we encourage jugaad. Dont make things more complex than they need to be, just because they sound cool.
- **Be a [Honeybadger]** (<https://www.youtube.com/watch?v=NvIaIDNxccw>) - Never give up. (P.S. check out videos of honeybadgers on youtube!)
- **Design for Honesty** - The design culture at RedCarpet is "Design for Honesty" (<https://www.redcarpetup.com/2017/11/29/design-for-honesty/>). Make sure you read about that.

Two Laws of Software Engineering: At RedCarpet we believe in two sacrosanct laws of software engineering. These can never be violated. Make sure you memorize these.

1. *"It is much harder to read code than to write it"* - Anyone can write code. Very few can read code. The popular opinion is that "Creating a new software project is the impactful work. Fixing bugs is boring". The reality is that - fixing bugs is not boring. It is much harder since you need to read existing code and

understand it. A hundred monkeys can write the code that you can. But only a great engineer can read code. It is very easy to write code/proposals/designs. It is very hard to read someone else's code/proposals/designs. At RedCarpet we recognize that a lot of poor decisions that are made is because of this problem.

- Corollary - The more code you read, the better engineer you become. Read a lot of code on Github.
- Make it easy to read code. Write testcases.

2. *"Premature complexity is the root of all evil"* - Only write as much code as is required to solve the problem.

Dont build something extra to make it look "cooler". Dont use Tensorflow if a python script is sufficient.

- Corollary - never tell us *"I have written the code, but not run it"*. If you have written one line/function of code, you better have run it.

How to Follow this guide - this guide is split into multiple tracks. There are specific mentors for each track. It is your responsibility to approach them. **Important note** - wherever it is mentioned that "show this to your mentor", it means you have to show completion of that particular line item to your mentor. Remember it is **[your]** responsibility to call them and show them [as soon as] you have successfully completed that task. This is not like college where we will call you for assignment submission.

[For each and every tutorial that you do, show WORKING CODE. Even if it is a language tutorial. Do not just watch a tutorial. If we ask you to show the code and then cannot produce it, we will ask you to redo the tutorial again. The code must be in running form in an IDE/script (not in notepad or a word document)]
IMPORTANT: Make sure you have a printout of this guide. Get a signature from mentor on EVERY SINGLE point in the guide.

Failure to submit (even if you have completed it) will be taken as a negative point.

What is a "Bezos style" Memo? Being able to write and express your thoughts is a first-order skill at RedCarpet. We are inspired by the thoughtfulness that Jeff Bezos put in the notes that made Amazon the most valuable company on earth. NOTE: **Memo questions need to be done at home and not in the office**

*We don't do PowerPoint (or any other slide-oriented) presentations at Amazon. Instead, we write narratively structured six-page memos. We silently read one at the beginning of each meeting in a kind of "study hall." Not surprisingly, the quality of these memos varies widely. *

Here's what we've figured out - great memos are written and re-written, shared with colleagues who are asked to improve the work, set aside for a couple of days, and then edited again with a fresh mind. They simply can't be done in a day or two. The key point here is that you can improve results through the simple act of teaching scope -- that a great memo probably should take a week or more.

A memo has five rules:

1. You cant use "points" or "bullets". You have to explain in paragraph and in words. Even things like data and numbers must be explained in words.
2. No graphs or tables
3. Must have elaborate appendix - which can have tables, graphs and other references. This is mandatory. However, you should write a memo with expectation that most people will not look through this section.
4. The title must have a very well defined goal. It cant be vague - You will cover the Why, What, When, Who and How of achieving the goal in the memo.

5. Follow the SCQA style - <https://analytic-storytelling.com/online/module/slides/AnalyticStorytellingBuildAClearStructure.pdf> (https://analytic-storytelling.com/online_module/slides/AnalyticStorytelling_BuildAClearStructure.pdf) and https://analytic-storytelling.com/online/module/slides/AnswerModel_Exercise.pdf (https://analytic-storytelling.com/online_module/slides/Answer_Model_Exercise.pdf)

Preparation for the training program As mentioned in the Offer letter, there are some recommended requirements for the internship:

1. Operating System - **Windows 8 is NOT ALLOWED**. There are too many problems with packages. Windows 10, Mac OSX and Linux are all allowed. (We recommend Linux)
2. Hardware - The most important change you can make to your laptop is to get a SSD (Solid State Hard Drive). It will boost your performance 10X more than a CPU/RAM. We HIGHLY HIGHLY RECOMMEND you buy a 250 GB Kingson SSD (<https://www.amazon.in/Kingston-SSDNow-Internal-SA400S37-240GIN/dp/B079TH8YZQ>) (2,500 INR) or Crucial MX500 series (<https://www.amazon.in/Crucial-MX500-500GB-2-5-inch-SSD/dp/B0786QNS9B>) (500 GB for 5500 INR). It can mean the difference between a highly successful internship and being on the bottom tier. Remember that you cannot use this as an external disk - you need to replace your main hard drive and reinstall your operating system. (You can order from amazon and get someone from Urbanclap to install the SSD + operating system within a few hours).
3. Security key setup - you may be given a security key later. this is how you set it up.
<https://gist.github.com/sandys/3af5a5f26b7a3b8f28dcdbf4092876e0>
(<https://gist.github.com/sandys/3af5a5f26b7a3b8f28dcdbf4092876e0>)
4. **Wifi setup** - we use 5ghz enterprise grade wifi using Ubiquiti. Some older laptops dont work properly with this setup. If you have a laptop older than TWO years, then please buy a **dual band USB wifi adapter (with 5ghz support)**. One example is this (<https://www.amazon.in/TP-Link-Archer-T2U-Wireless-Adapter/dp/B07KRCW6LZ>). P.S. Please ensure it works with your laptop and OS. Choose the one that you prefer.

Do you know how the web works ? we bet you dont. Read this (<https://github.com/vasanthk/how-web-works/blob/master/README.md>)

The Bridge (QA Testing)

- Day 1
 - Markdown - <https://www.markdowntutorial.com/> (<https://www.markdowntutorial.com/>)
 - [<https://www.udemy.com/istqb-foundation-level-training/>](ISQTB (<https://www.udemy.com/istqb-foundation-level-training/>)(ISQTB) testing syllabus)
- Day 2
 - Beginners javascript (<https://www.udemy.com/javascript-the-beginners-guide-with-hands-on-coding/>)
 - Python (<https://www.udemy.com/python-for-absolute-beginners-u/>)
- Day 3
 - <https://www.udemy.com/sql-for-newcomers-free/> (<https://www.udemy.com/sql-for-newcomers-free/>)
- Day 4
 - <https://www.udemy.com/postman-crash-course-for-beginners-learn-rest-api-testing/> (<https://www.udemy.com/postman-crash-course-for-beginners-learn-rest-api-testing/>)
 - Tests in Postman
 - Part 1 (<https://www.youtube.com/watch?v=pi9MxX0HSHU>)
 - PART 2 (<https://www.youtube.com/watch?v=nhY481EGMro>)
 - Other Postman videos (<https://www.getpostman.com/resources/videos-tutorials/>)
- Business track (Day 5)
 - Prerequisite

- Learn how to use Flowmapp (<https://flowmapp.com/help/user-flow-diagram-tool/> (<https://flowmapp.com/help/user-flow-diagram-tool/>))
- Preliminary questions to be discussed with your mentor
 - Answer the following question "Why do customers take a loan from RedCarpet? Why do they share all data (like GPS, contacts, etc) with us? Why dont they go to a bank?"
 - Answer the following question "how many such customers are there in India, who require a loan from us"
- Day 1 : Spend one day shadowing the Loan disbursal team. Sit behind the operational person who is doing work.
 - Create a flowchart in Flowmapp explaining how the Loan disbursal team works in high degree of detail.
- Day 2 : Spend one day shadowing the KYC team. Sit behind the operational person who is doing work. Observe the work on the "Primer" tool
 - Create a flowchart in Flowmapp explaining how the KYC team works in high degree of detail.
 - Create a flowchart in Flowmapp explaining how customer uses the app in high degree of detail.

PrivateBin - Because ignorance is bliss

1.3

PrivateBin is a minimalist, open source online pastebin where the server has zero knowledge of pasted data. Data is encrypted/decrypted *in the browser* using 256 bits AES. More information on the project page (<https://privatebin.info/>).