Join us OR the MARS mission!	What do we expect?	DOs and DONTs
Do you know why Amazon engineers are most sought after? At Amazon, our engineers are on mission to solve big and real world problems for long term. They take up challenges that most engineers outside may not dare to attempt and solve in way that it disrupts the entire industry from technology, business perspective and eventually results in making the world a better place to live. AWS, Kindle, Echo, Alexa, Dynamo DB are few of the innovations that the external world know of, there are hundreds of innovations you may not have heard of but they make Amazon what it is and what it is going to be. In simple sense "***human excellence in Software engineering is expressed in the form of Amazon"*** and you have an opportunity to become a part of this amazing journey.You may like knowing about Amazon directly from the man behind it **Jeff Bezos on Amazon journey**	**Coding & Problem solving** You will be given a real world problem that may deal with Time and Space complexity. Your approach while solving the problem and whether you gave an optimized solution are the two key things we keenly observe. You are expected write **clean, modular, reusable, production quality** and **Bug free** code. It will be really good if you find any missing edge cases (in any) in your code on your own, so validating is the key here. You can code in any Object Oriented Programming language of your choice. It will be really useful if you are aware of Data structures such as **Link-list**, **Queues**, **Arrays, Trees, Binary trees, Stacks, Hash map** etc. and Algorithms **Sorting, Merging, Searching, Heap** and **Traversal.** **Design (HLD, LLD) – Object Oriented Design** Just imagine if you were one of the first employees working on Amazon.com, a real-time web based product.You are asked to come up with the design - You will do well if you stay curious and ask a lot of clarifying questions, gather more requirements - Once you know what you need to build, chose right architecture and start the design – identify components, establish interactions, choose technology. All of these decision starting from design choices to technology choices, you will put a lot thought behind, analyze the tradeoffs and take right calls - We will be interested to see if you could think about long term and explain how you are going to manage nuances like **scalability**, **high availability**, **performance**, **fault tolerance** and **security**. Refer Scalable Web Architecture and Distributed Systems. **Your current/past work** We expect you take us through the details around complexities you had to handle, and how you dealt with these complexities during design, architecture choice and other various innovative ideas you proposed and implemented all these years. We expect you to give us all the details starting from Design, various components, interaction between these components, class level details technology choice you made and the reasoning behind using these technologies. Referring to **Bias for action**, **Deep dive**, **Insist on High Standards** from the Amazon Leadership Principles document shared with you will be useful.	✔ **Take time to reflect on your previous projects, refresh on the technical complexities you managed and solved.** ✔ **Provide technical details and emphasize your personal contribution.** ✔ **Validate your assumptions with the interviewer if you are making any.** ✔ **Use a whiteboard or a paper to draw components, class and sequence diagrams.** ✔ **Ask questions if you need more details.** ✔ **Be prepared to talk about the most difficult project you were part of.** ✔ **Talk about one/two most innovative things you have done** ✘ **Do not talk high level/vaguely** ✘ **Do not make assumptions without clarifying with the interviewer.**