

Developer Roadmap

A TOOL FOR CAREER PLANNING AND TRAINING

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*To succeed in your mission,
you must have single-minded devotion to your goal.*

A.P. J. Abdul Kalam

Why do you need this guide?

Every journey begins with a purpose, a desire to reach a destination. Even before you can begin you need to know where you are, and how to reach destination. More often than not, you lose track of destination and deviate. Ensuring you are on track, reaching milestones along the way are necessary. More importantly staying the course till destination and course corrections are key to reaching your destination.

You can achieve more, when you are clear about your goals, and know what you need to achieve your goals. This guide is to help you to identify your goal, find your options to reach it, break it down to action items, identify gaps and make corrections, and to persist until you succeed.

Further in this guide you will have options to write down

1. Career Goals
2. Job Listings
3. Skills Sets
4. Alumni Network
5. Learning Plan
6. Weekly Action Plan
7. Progress Tracker

Career Goals

The first step to success is to identify list of career choices that are aligned with your values, interests and skill set. There are more choices in Information Technology industry than ever before. Software Engineering, Web Development, Data Science, Database Administration and Cyber Security are some examples of areas you can explore. Explore all you your options and write them down.

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Job Listings

You may have chosen some career options by now. Look up for job listings and find companies hiring for your career interests. Read through job descriptions carefully and note down skills required. This exercise should give you an idea of what combination of skills are required for a specific role. Write down name of companies hiring for your career choices and its URL below. You can come back to this list when you are ready to apply for jobs.

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Skill Sets

In the previous exercise of reading through job listing and job description should have given you an idea of what combination of skills make up for a specific role. For example, web development requires HTML, CSS and JavaScript. Write down skills required for the role you are interested in below.

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Alumni Network

While you can succeed by following the guide, you can accelerate progress by taking help from the experienced. That's where alumni can help you in many ways, help you learn and prepare for jobs and also refer you for open positions. Get hold of your alumni network, it can help you in your job and beyond.

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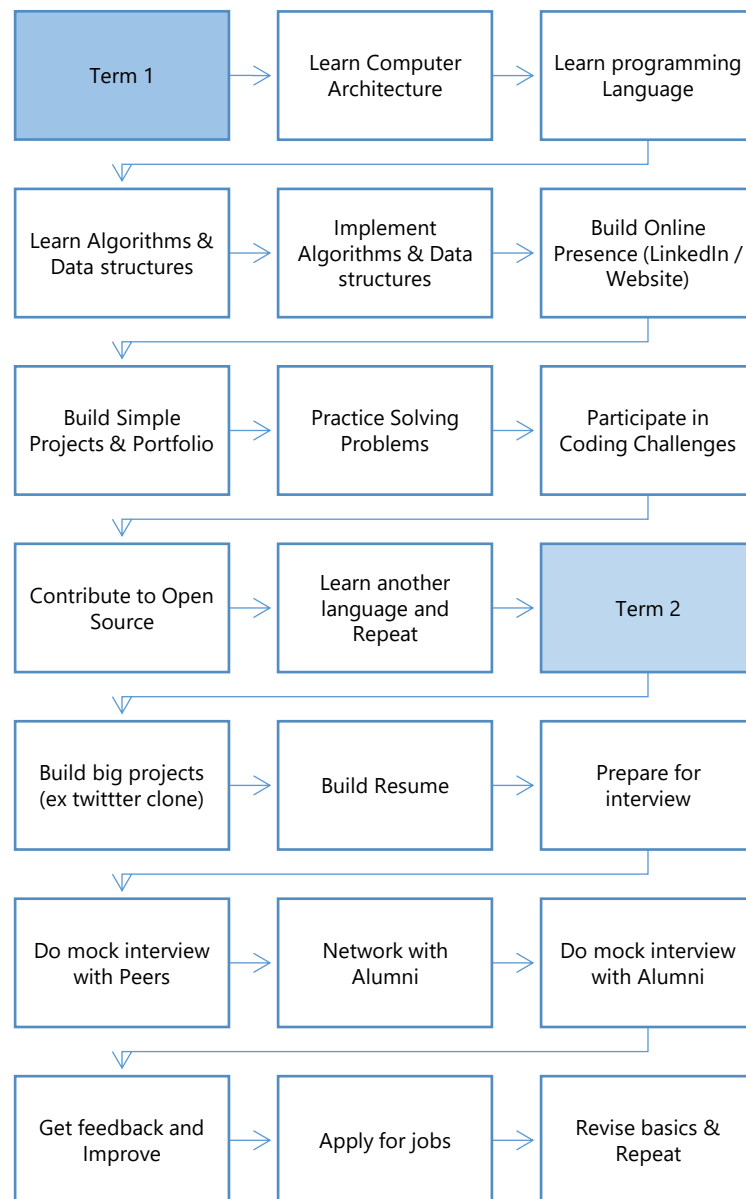
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Learning Plan

There is a saying when it comes to achieving great goals - 'Rome wasn't built in a day'. And yes, Rome was not built in a day. It was the result of laying one brick after another consistently for years. In retrospect it could be intimidating to build Rome, but if you break it down to fundamentals, you just need to lay one brick after another.

All you need to achieve your goal is to start small and make another small step in the same direction. More importantly build a learning routine, make it a habit, and success will follow. Below is an example of a learning plan for software engineering.



Weekly Action Plan

A week is just enough time to make good learning progress, start planning your week on every Friday, make the most out of Saturdays and Sundays for learning to make up for week days.

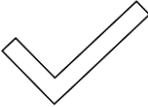
Write down your learning goals for the week, work towards completing each task during the week and at the end of the week review your learning and write down your achievements and areas of improvements. Below is an example of a plan for a week.

Learning Goals:	Week Start: _____	Week End: _____
<i>Read W3Schools - Learn HTML Basics</i>		
<i>Watch HTML for beginner's crash course in Udemy</i>		
<i>Read CSS basics in CSS-tricks</i>		
<i>Create basic login page with HTML & CSS</i>		
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Apply the same process for each week, for 2 complete terms of 4 months each (totaling 32 weeks), aligned to universities academic calendar. Mark each week as done once you complete your plan in the tracker below.

Progress Tracker - Term One

Add a tick mark on completion of each week's goals.

Week 1	Week 2	Week 3	Week 4
			
Week 5	Week 6	Week 7	Week 8
Week 9	Week 10	Week 11	Week 12
Week 13	Week 14	Week 15	Week 16

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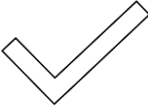
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Progress Tracker - Term Two

Add a tick mark on completion of each week's goals.

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Build A Resume

Each job requires a specific skillset, and almost every single time resumes goes through a screening process for the job in consideration. Employers spend very little time scanning through resumes for shortlisting potential candidates. Make it a priority to update your resume relevant to the job you are applying, keep it clear, concise and relevant.

Make your skill sets, projects and experiences stand-out in your resume. Interviews likely start with questions around what is on your resume. Be true to what you put on it and be prepared to answer any questions around them. Get it reviewed with your peers and seniors. Always have a printed copy in your hand each time you step out.

Build a similar profile online as well on LinkedIn, this will help companies find out about your skills. You also have an option to showcase your projects and portfolios online.

Mock Interviews

Mock interviews help you prepare and face real interview confidently, you will also get to know areas of improvement and work on them early. Work with your peers and perform mock interviews, ask the interviewer for written feedback on what went right and what went wrong during the interview and work on them.

Now is the time to follow alumni network and schedule mock interviews. Show up on time well prepared, never skip, miss interviews. Take the interview and feedback seriously. Do as many mock interviews as you can with different members on the network. Bonus point: Although you may not control the outcome you have a chance to lead the interviewer into your area of expertise with every answer and be genuine.

Learning Resources

Roadmaps

1. <https://roadmap.sh/>

Courses

1. <https://www.udemy.com>
2. <https://www.coursera.org/in> - All courses are free to audit
3. <https://www.pluralsight.com/>
4. <https://ocw.mit.edu/index.htm> - MIT Open courseware
5. <https://nptel.ac.in/courses> - NPTEL
6. <https://www.nand2tetris.org/> - Special Mention

Reading List

1. <https://www.freecodecamp.org/>
2. <https://www.geeksforgeeks.org/>
3. <https://developer.mozilla.org/en-US/docs/Learn>
4. <https://www.theodinproject.com/>
5. <https://www.w3schools.com/>
6. <https://egghead.io/>

Practice

1. <https://www.hackerearth.com>
2. <https://www.hackerrank.com/>
3. <https://leetcode.com/>
4. <https://www.interviewbit.com/>
5. <https://www.codechef.com/>

Tools

1. <https://github.com/>
2. <https://vscode.dev/>
3. <https://codepen.io/>

Notes
