SOFTZINO TECHNOLOGIES

PRESENTS

CAREER IN IT

সম্ভাবনা ও বাস্তবতা

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Speaker

Crack the Code: Unlocking Your Path to a Software Engineering Career

S M ASAD RAHMAN

CTO, Monstar Lab

AN EVENT BY MUSLIM ENTREPRENEURS COMMUNITY

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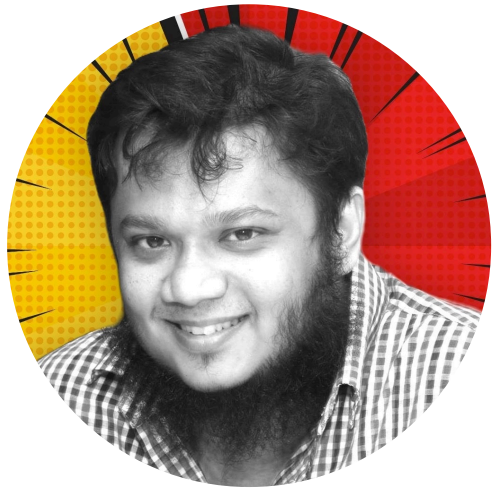


S M Asad Rahman

Software Architect | Full stack Developer | Engineering Manager

Monstarlab Bangladesh

CTO, Jan 2018 – present

Sr. Software Architect, Feb 2016 – Dec 2017

Invesp

Software Architect

Nov 2012– Jan 2016

loosemonkies

Sr. FE Developer

Jan 2009 – Aug 2010

Invesp

Sr. Software Engineer

Sept 2010– Oct 2012

BGlobal

Sr. PHP Developer

Jan 2009 – Aug 2010

EVOKNOW, Inc

Software Engineer

Jan 2007 – Nov 2008

Why should we consider SWE as a career?

- Higher Salary
- Flexible work/life
- Only and only skill-oriented career growth
  (no মাম্মা/চাচ্চা or তেলা/চাটা needed)
- Remote Job opportunities in global companies,
- Opportunities available for skills migration/

More importantly (এছাড়াও)

- Most people are humble and full of empathy
- Super helpful community
- Flat company culture,
- A good number of practicing Muslim bothers
- Freedom (Cyclone দেখার সু-ব্যবস্থা)

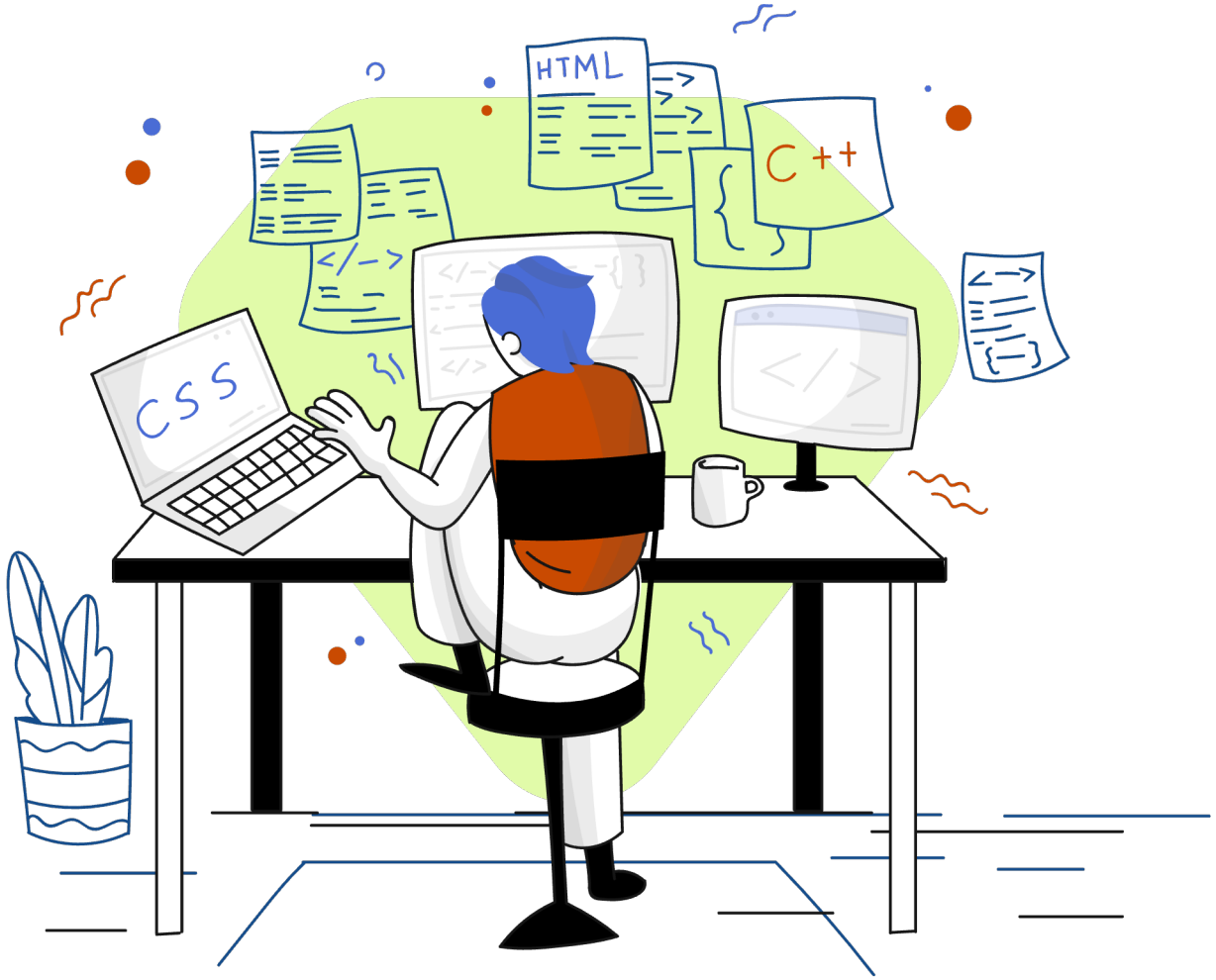


Image source: https://www.theforage.com/career-path/software-engineering

Do I need CS degree?

- No, many of the industry leaders are from non-CS / non-tech background

Assessing If SWE is the right track for me ?

- Problem-solving ability
- Passionate with technology,
- Patience for a long learning path
- Mindset to adapt with new tools, tech, and methodologies, etc.
- Focus & attention to details
- Strong interpersonal skills

Core fundamental tech skills needed for SWE

- Proficiency in programming language (PHP, Java, Java Script, Python, C++)
- Data Structure (Array, graph, linked list, etc)
- Algorithm (searching, sorting)
- DBMS (SQL, NoSQL)
- Version controlling/GIT
- Containerization/ Docker, etc

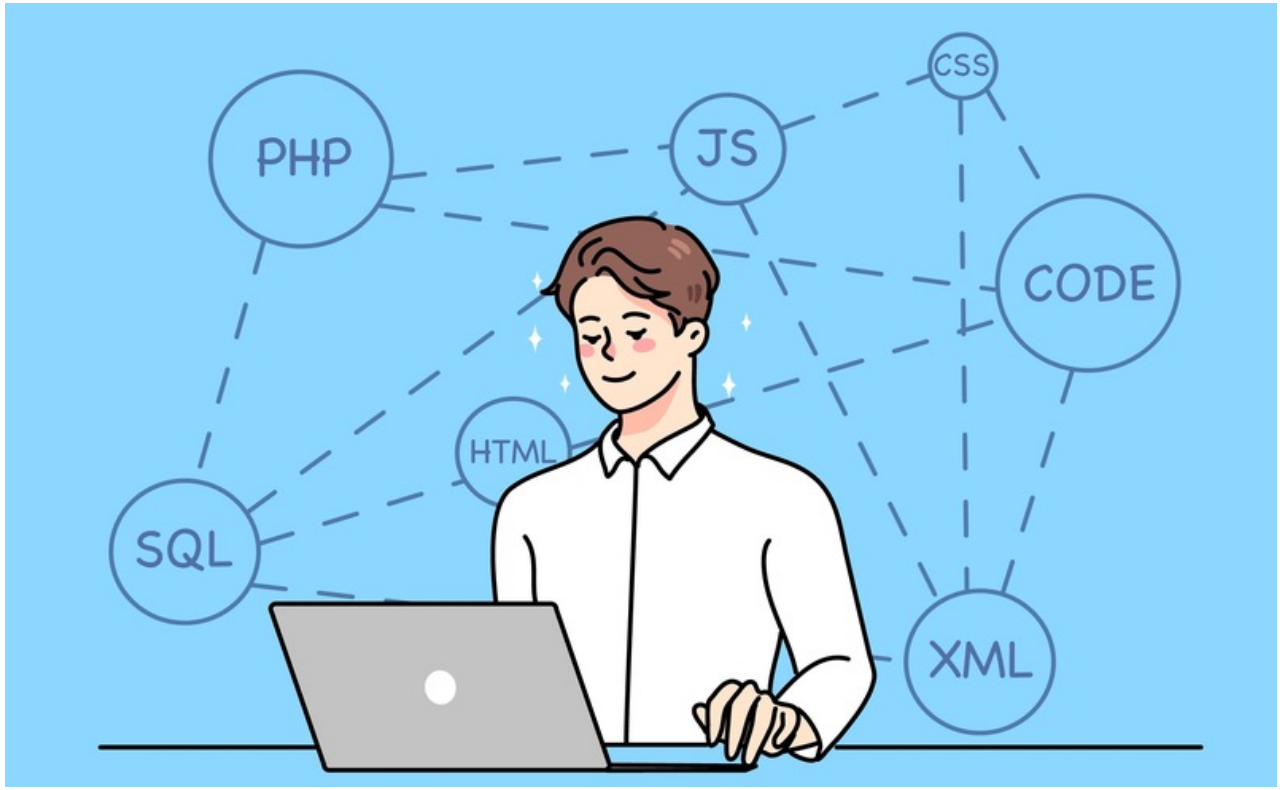


Image source: https://www.springboard.com/blog/software-engineering/skills-needed/

And concept of

- Software development methodologies (Agile, Scrum, etc)
- Software Architecture & Design patterns
- Understanding of cloud computing
- CI/CD, etc

Web specific knowledge, like

- Java Script, HTML, CSS/SCSS, etc
- Browser, Dom related concepts
- FE frameworks (React, Vue, Angular)
- Ajax, state management concepts
- Build, prettier, package manger tools
- PWA, Static web, Headless CMS, performance optimization, Responsive web, etc.
- Browser debugging tools, Testing tools, etc

It's too much!

Source: https://www.vecteezy.com/vector-art/13489067-brain-explosion-and-stress-concept-shouting-angry-stressed-female-standing-touching-head-having-explosion-on-thoughts-and-emotions-vector-illustration

Okay, then where do we start from?

1. Don't go for full stack, pick a side

- Backend API Developer,
- Frontend Web Developer,
- Mobile developer iOS, Android
- CMS Developer (WP, Magento, Shopify), etc.

2. Pick a language & framework

- Pick a technology and framework where resources and more importantly mentorship will be available, (ex: PHP + Laravel)

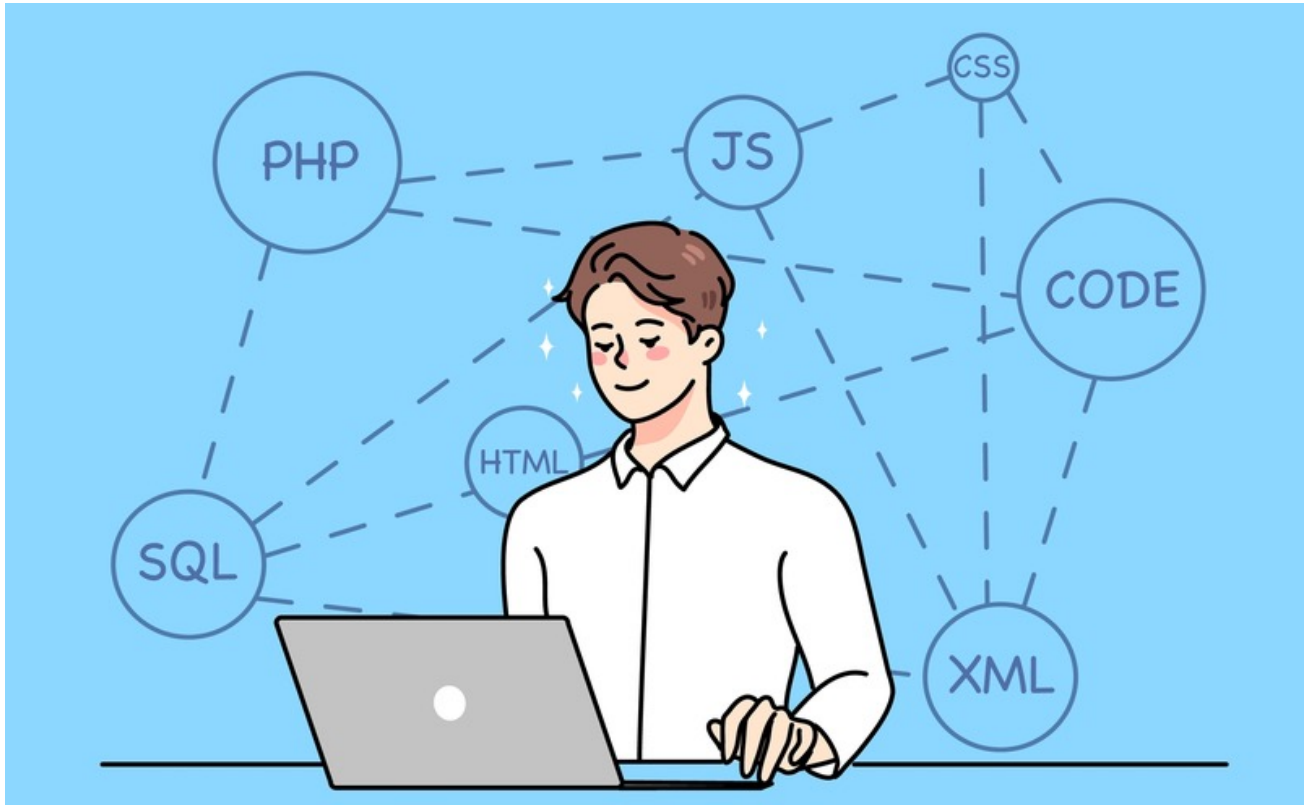


Image source: https://www.springboard.com/blog/software-engineering/skills-needed/

3. Try documentation, getting started guide.

- Try yourself with getting started guide, documentation first, github readme, sample projects.
- Don't start with video course first.
- Create small simple projects like todo apps.

4. Video resources, tutorials

- Use video resources for understanding the entire eco system, best practice and advanced topics.

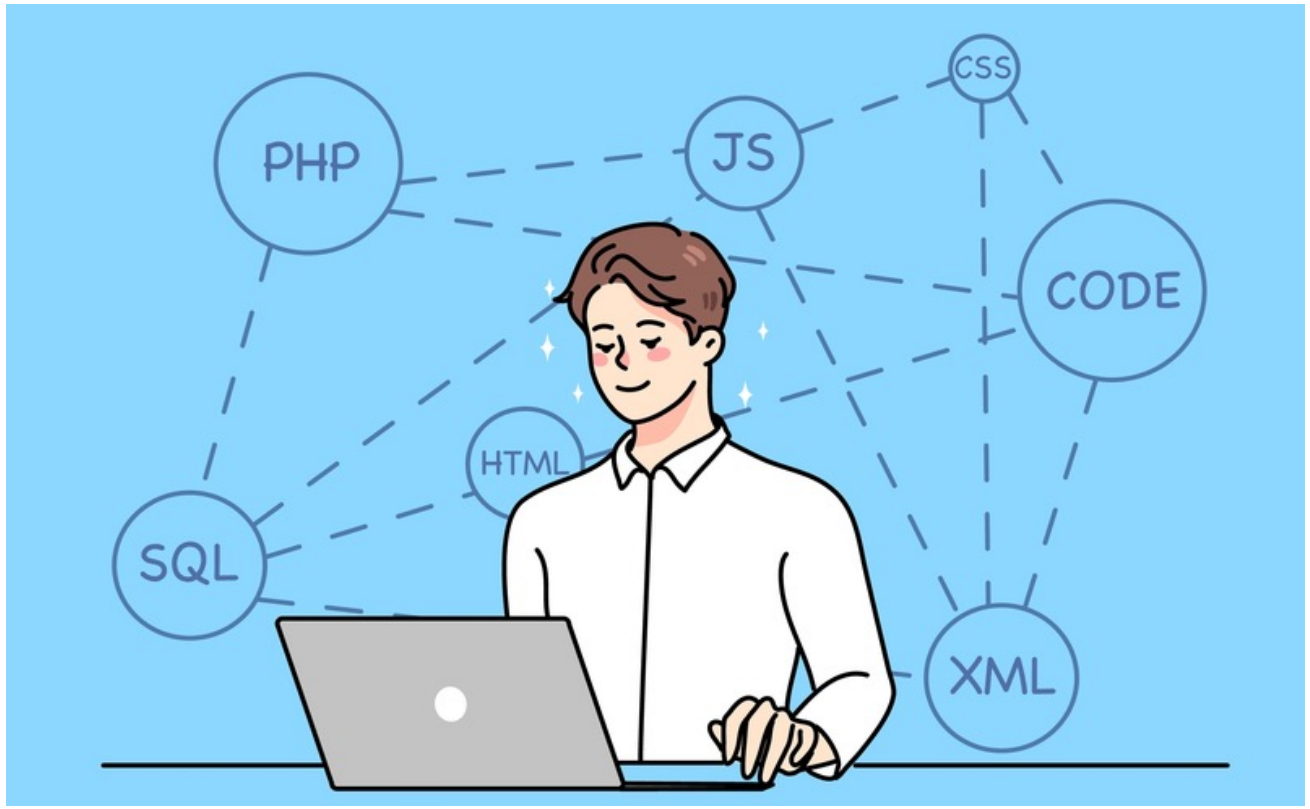


Image source: https://www.springboard.com/blog/software-engineering/skills-needed/

5. Create a codebase to showcase

- Use your best effort to create an app (even with the stupidest idea)
- Ask senior brothers, approach teams to review your code base
- Find internship/ mentorship/ job opportunities.

6. Team, Project, Mentorship!

- Best place to learn is to work in real project
- Learn from teammates, seniors, team practices
- Learn from real life project challenges.

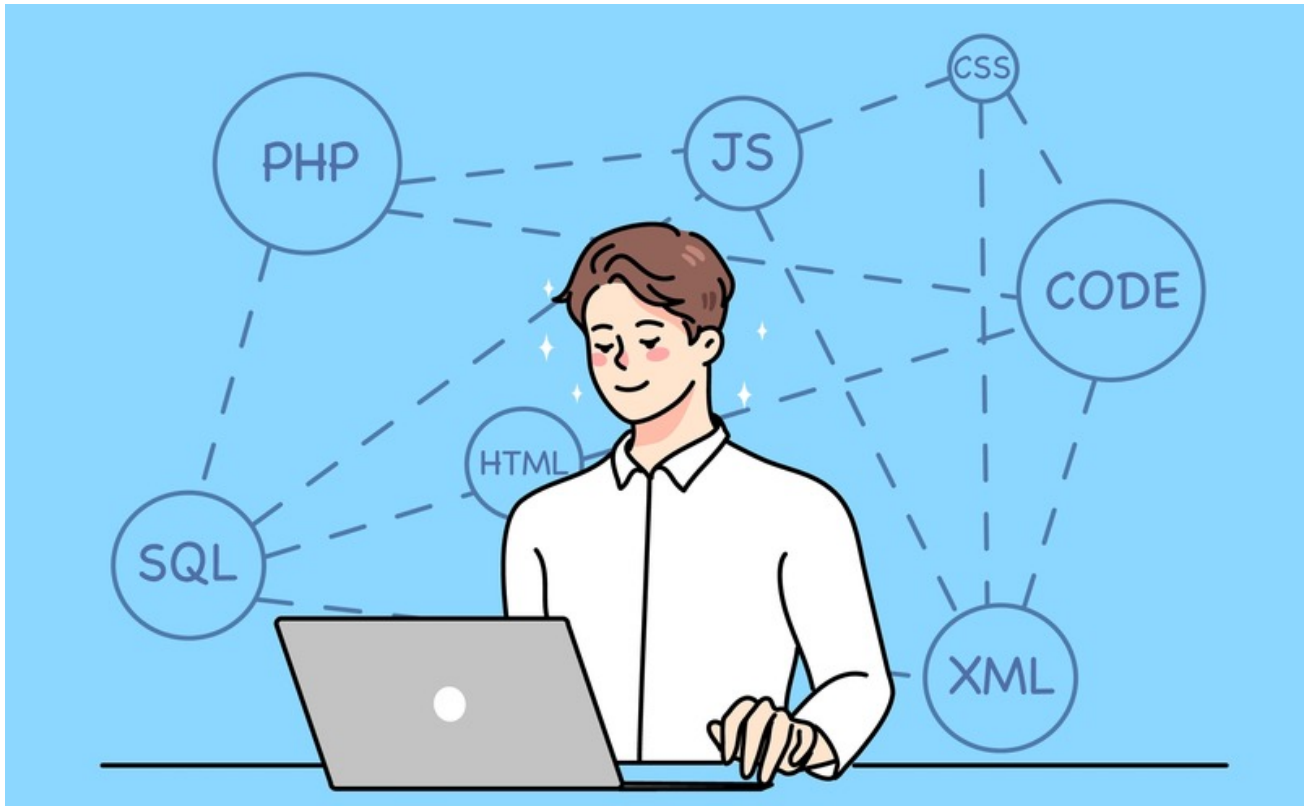


Image source: https://www.springboard.com/blog/software-engineering/skills-needed/

Preparing for job interview/ issues

Prepare CV

- Get Idea about the company, their tech preferences from JD and website
- Do not copy paste CVs. Update CVs every time before applying for a job

Don't mess-up with basic theories

- Object oriented programming
- Database concepts, Normalization, constraints, Joining, etc
- Basic design pattern

Make sure you are culturally fit

- Do not mix up english-bangla
- Properly listen, ask again to understand the problem
- Answer in a way that you are discussing solution and want to listen from the interviewer as well.

Continuous learning for growth

Focused learning

- Pick one advanced topic at a time,
- Set small targets
- end up with some coding output

Keeping updated with echo system

- Read 10 min blog,
- Watch tech conference videos

Coding quality improvement

- Watch opensource large projects on github

Pet projects

- To try latest tools, technologies maintain pet projects

Different sectors tastes different

1. Outsourcing
- Work in stressed environment
- Domain diversity
- Tech diversity

2. Product Company/ Startups
- Deep domain expertise
- Learning the product journey

3. Remote Jobs
- Requires Self-management & overall maturity
- Exposer to work in global teams
- Process, standardization, collaboration, etc

5 Theming/ Plugin company
- Ideation, creativity

6. Stablished big product company/ corporate house
- Process, standardization
- Big data handling, real life product's business journey

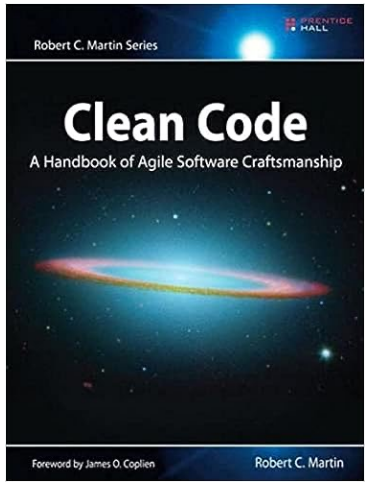
Soft skills improvement

- Communication skill
- Time Management
- Leadership
- Ownership
- Meeting Etiquette
- Stress Management
- Presentation Skill
- Conflict resolution
- Negotiation Skill
- Cultural Awareness

Work with self-branding

- Personal blog
- LinkedIn profile
- Networking
- Working in OS
- Community activity, etc

Books recommendation



Clean Code by Uncle Bob Martin

https://refactoring.guru/

Thanks, QnA