

HERE'S
EVERYTHING
YOU NEED TO
GET STARTED
THE COURSE
ROADMAP &
A DETAILED
CURRICULUM

Curriculum group: 068 Interdisciplinary study field of information and communication technology.



Module 1. Software Development Life Cycle. The first stage – planning. Hiring analysts

You will learn:

- Technical competence. What do you need to know and why?
- What does a company's HR or IT recruiter definitely need to be competent in?
- How are software products created and developed?
- What is a Software Development Life Cycle and what are the roles of each stage?
- What happens during the first planning stage?
- How to recruit analysts?

Module outcomes:

- You will learn to research any IT terminology and find answers independently.
- You will understand how products are born and made.
- You will know the logical connection between product development stages and IT roles in each stage.
- You will see in which market sector is your company positioned, its type, and in which development stage is your company's product.
- You will learn to distinguish such terms as product roadmap, B2B, B2C, scaleup, start-up, product roadmap, feasibility study etc.
- You will know the difference between the BI Analyst and Business Analyst.

Takeaways:

- Additional reading and watching materials for the lesson.
- IT Knowledge Base: SDLC
- Mind Map Software Development Life Cycle (SDLC).
- Mind Map Types of Products and Companies.
- IT Role Job Order Checklist, Job Description Template.
- GlossaryTech Chrome extension, other useful plugins.

Bonus:

HOW TO Lesson. How IT specialists are looking for information?



Module 2. The second stage of SDLC - design and architecture. How to hire designers, architects and product specialists

You will learn:

- What are the product development stages from prototyping to launch?
- Which roles exist in product development management? What is the difference between a PM, PO and the Product Manager?
- How is a product design created? The differences between UX, UI and graphic design.
- What are the nuances of architecture roles?

Module outcomes:

- You will be able to easily differentiate and analyse the nuances of UX,
 UI, product designer and graphic designer vacancies and profiles.
- You will be easily able to differentiate the vacancies and profiles of a Product Owner and Product Manager, and ask them correct questions at the interview.
- You will understand the differences between different types of architects.
- You will understand such terms as MVP, wireframe, layout, mock-up, launch.

Takeaways:

- Additional articles and videos on the subject.
- IT Knowledge Base: Designers, Architects, Testers (QA), Managers
- Chart: PM vs PO vs BA.

Bonus:

PRO Lesson. How to find designers?



Module 3. Teamwork and processes. How do they do it? Top management roles in IT companies

You will learn:

- The differences between the methodologies: Waterfall and Agile.
- What is the difference between Scrum and Kanban?
- What are Scrum "rituals"?
- The tools used by tech teams for cooperation: JIRA, Confluence, Trello.
- Different types of teams by function types.
- The differences between monolith and microservices architecture.
- How to differentiate the nuances of management roles: VP of Engineering, Engineering Manager, CTO, Team Lead?

Module outcomes:

- You will understand how your team is structured.
- You will see which methodology your team uses in its work.
- You will know which Scrum "rituals" are implemented in your team.
- You'll find out how Agile is your team.
- You will understand such terms as sprint, release, stand up, ticket, backlog, retrospective.
- You will be able to analyse vacancies and resumes of management roles of an IT company.

Takeaways:

- Additional articles and videos on the subject.
- IT Knowledge Base: Managers.
- IT Knowledge Base: Tops.
- IT Talent's intake meeting questions.
- Software Development Methodologies Mind Map.
- Scrum Process Mind Map.

Bonus:

 PRO Lesson. How to use an Al assistant in learning technical competence?



Module 4. The third stage of Software Development Life Cycle — program. How to hire frontend developers

You will learn:

- The difference between fullstack, frontend and backend developers.
- What are the base technologies used in the work of frontend developers?
- What are frameworks and why are they needed?
- Which Javascript frameworks are most popular: React, VueJS, Angular?
- How are HTML and CSS used?
- What are Adaptive and Responsive design?
- How do designers and frontend developers cooperate?
- What is the difference between React and React Native?
- Using Javascript programming language in backend. NodeJS and Typescript.

Module outcomes:

- You will understand the difference between frontend, backend and fullstack.
- You will know what frameworks are and why they are used in development.
- You will learn the nuances of frontend roles and will be able to understand developer terminology.
- You will understand the intricacies of frontend vacancies and profiles, and the differences of frontend frameworks.
- You will find out how the Javascript programming language is used in both frontend and backend development.
- You will understand such terms as fullstack, responsive, adaptive, mobile-first paradigm.

Takeaways:

- Frontend Technologies Mind Map. IT Knowledge Base: Developers.
- Additional articles and videos on the subject.

Bonus:

PRO Lesson. All you need to know about GitHub.



Module 5. Backend. Part I. How to hire backend developers and database specialists

You will learn:

- Why do you need to know the project's tech stack?
- What are the important terms of backend development?
- How do frontend, backend and databases work together?
- What are the differences between object-oriented and functional programming languages?
- Which connections between programming languages allow one to quickly switch from one language to another?
- Using Javascript programming language in backend. Javascript (+Typescript).
- What are the existing popular object oriented programming languages (OOP)? Let's talk about Java, C#, Ruby, Go (GoLang), PHP, Python.
- Which projects use such functional programming languages (FP) as Elixir, Scala.
- What are the popular frameworks for backend: Spring, Rails, Django, .NET?
- What databases are there, and what are the nuances of database specialist vacancies?

Outcomes:

- You will understand how programmers work and why they must not be distracted from their work process.
- You'll be able to differentiate between the programming languages, frameworks and other technologies used in backend development.
- You will understand what types of projects use the above-mentioned programming languages.
- You will realize how programmers can quickly switch to another programming language.
- You will be able to differentiate relational and non-relational databases.
- You will know the difference between the roles of a Database Administrator and Database Engineer.
- You will understand such terms as ETL, API, Github, OOP, code review.
- You will feel confident asking and answering candidate questions.



Takeaways:

- Additional articles and videos on the subject.
- Development Mind Map.
- IT Knowledge Base: Developers.
- IT Knowledge Base: Database.
- Job description questions.

Bonus:

• PRO Lesson. How to source candidates on GitHub.



Module 6. Backend. Part II. The fourth stage of Software Development Life Cycle - testing. How to hire backend, mobile, embedded developers and QA specialists

You will learn:

- What is the C/C++ programming language used for and what is embedded development?
- What technologies are used in mobile development?
- What are the differences between native and cross-platform apps?
- Mobile development technologies: Android, Kotlin, iOS (Swift, Objective-C), React Native, Flutter.
- What type of mobile developers are there?
- Testing stage: what? why? how?
- The roles of QA: manual testing, automation, SDET.

Outcomes:

- You will study the nuances of professional roles in mobile development.
- You'll be able to understand the nuances of testing-related vacancies.
- You will know the terms often used in vacancy descriptions such as highload, scalability, vulnerability, clean code.
- You will be able to speak the same language as the development team.
- You will clearly determine the developer's experience by looking at their profile.
- You will confidently navigate in development vacancy descriptions.

Takeaways:

- Additional articles and videos on the subject.
- Development Mind Map.
- Testing Mind Map.
- IT Knowledge base: Developers.
- IT Knowledge base: Testing.

Bonus:

 PRO Lesson. How to find the contacts of the candidates you found on Github.



Module 7. The fifth stage of the Software Development Lifecycle - deployment. How to hire DevOps, SRE Engineers and Infrastructure Engineers

You will learn:

- Difference between DevOps, TechOps and SRE.
- Code deployment, containerisation and app container orchestrating.
- What are the differences between Infrastructure Engineer, System Administrator and Network Administrator roles?
- Support specialists. Difference between Level 1, Level 2 and Level 3 support.
- How is data analysis done?
- What instruments are used for data visualisation? BI and Data analytics.
- How to select Data Science specialists? Machine learning.
- What are the security roles? Security specialists.

Outcomes:

- You will learn the difference between deploy and release.
- You will know the difference between containerization and orchestration.
- You will understand the difference between SRE, Devops Engineer, Infrastructure Engineer.

Takeaways:

- Additional articles and videos on the subject.
- IT Knowledge Base: Deploy.
- Mindmap: DevOps.

Bonus:

HOW TO Lesson. How to reach out to IT candidates.



Module 8. The sixth stage of Software Development Lifecycle - maintenance. How to hire maintenance, support and security specialists

You will learn:

- What is the maintenance stage of SDLC about?
- What roles are involved in the maintenance stage?
- What is the difference between a system and a network?
- What is the difference between a system engineer and a system administrator?
- Support specialists. Difference between Level 1, Level 2 and Level 3 support.
- Why should a company hire Security Specialists?
- What are the security roles? Security specialists.

Module outcomes:

- You will learn what the maintenance stage of SDLC is and what roles are involved.
- You will learn the difference between System and Network Engineers and Administrators.
- You will know about all types of support and the difference between support specialists of Level 1, Level 2 and Level 3.
- You will understand the difference between security roles and their responsibilities.

Takeaways:

- Additional articles and videos on the subject.
- IT Knowledge Base: Deploy and maintenance.
- IT Knowledge Base: Support levels.
- IT Knowledge Base: Cyber Security.

Bonus:

PRO Lesson How to prepare for an interview with the help of AI



Module 9. The final stage Software Development Life Cycle — analyze the results. How to hire for Data roles

You will learn:

- What is the final stage of SDLC about?
- How is data analysis done?
- What are the main roles in data analysis and BI?
- What is Data Science? What do Data Scientists do?
- What tools are used for data visualisation? BI and Data analytics.
- How is data extracted, transformed, analysed and visualised?
- What is Business Intelligence, Machine Learning and Artificial Intelligence?

Outcomes:

- You will understand the difference between Business Intelligence and Data Science.
- You will know the difference between Database specialists and Data specialists, Business Intelligence specialists and Data Science specialists.
- You will learn the difference between a Data Engineer, Data Scientist,
 Machine Learning Engineer.

Takeaways:

- Additional articles and videos on the subject.
- IT Knowledge Base: Data.
- IT Knowledge Base: Database.

Bonus:

PRO Lesson. How to source data candidates on Kaggle.



Module 10. How to stand out as an IT Recruiter

You will learn:

- What is a formula for an ideal job description?
- Expectations of a recruiting manager and candidate.
- The needs and motivations of IT specialists on the basis of Maslow's pyramid.
- How to stand out among the crowd of IT recruiters?
- How to conduct an interview in a way that candidates would recommend you to their friends and how to become a "go-to" person? The "give to take" principle.
- How to keep yourself up to date with technologies and trends of the IT market?
- How to develop your technical competence further? Who to follow, what other books and articles to read?

Outcomes:

- You will learn how to correctly manage the expectations of candidates and recruiting managers.
- You will be able to switch to a candidate-centric recruitment approach.
- You will know how to have a first quality interview that lets you correctly filter out candidates.
- You will be able to quickly evaluate the developer's experience and assume their motivation to switch jobs.
- You will understand how to keep an eye on the trends and popularity of technologies.
- You'll be a confident specialist in a constantly changing world.

Takeaways:

- Additional articles and videos on the subject.
- IT Recruiter Mind Maps (all of the course's mind maps put together).
- Recommendations for further learning.

Bonus:

 HOW TO Lesson. How to write a job ad in an attractive way for IT specialists?



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