Current track is **Java Developer** change   Current project: <u>Bulls and Cows</u> change. Stages completed: **1 / 7**.

You'll complete the current stage in 10 minutes, the project in 4 hours.

⊕ Frontend^β ── 0 / 24 topics

⊕ Math^β ── 0 / 29 topics

⊕ Algorithms ── 50 / 50 topics

⊕ Databases and SQL^β ──────────────────────────────── 0 / 17 topics

⊖ **Essentials**

  ⊖ Object-oriented programming

         <u>Introduction to OOP</u> 3★ ••• [Stage 3]

  ── External resources •••   <u>Units of information</u> •••• [Stage 1]   <u>Files</u> •••

  ⊖ Software design and architecture

       <u>The concept of patterns</u> •••   <u>Frameworks</u> •••   <u>Immutability</u> •••   <u>Data and object mapping</u> •••

       <u>Libraries</u> •••   <u>Object-Relational Mapping(ORM)</u> •••

  ⊖ Software quality

       <u>Bugs and debugging</u> •••   <u>Introduction to logging</u> •••   <u>Unit testing</u> •••

  ⊖ Web technologies

       <u>World Wide Web</u> •••   <u>HyperText Transfer Protocol</u> •••   <u>HTTP URL</u> •••   <u>HTTP messages</u> •••

       <u>HTTP Basic Auth</u> •••   <u>REST</u> •••

  ⊖ Data formats

       <u>JSON</u> •••   <u>XML</u> •••

  ⊖ Regular expressions

       <u>Regexps basics</u> •••

  ⊖ **Intro to programming**

       <u>Intro to computational thinking</u> 7★ •••   <u>Components of computational thinking</u> 7★ •••

  ⊖ Fields of programming

       <u>Natural language processing</u> •••

  ⊖ Multithreading and multiprocessing

       <u>Synchronous, asynchronous, parallel</u> •••   <u>Concurrency and parallelism</u> •••   <u>Processes and threads</u> •••

  ⊖ Operating systems

       <u>Introduction to operating systems</u> •••

  ⊖ Command line

       <u>Command line overview</u> •••   <u>Parameters and options</u>

⊕ Dev tools ── 3 / 18 topics

⊕ Java ── 66 / 239 topics