**Basic Knowledge**

1. Version Control (basic git commands)

**Java Core (** <http://www.r-5.org/files/books/computers/languages/java/main/Benjamin_Evans_David_Flanagan-Java_in_a_Nutshell_6th_ed-EN.pdf> **)**

1. Basic Java constructs like loops and data types
2. String handling
3. Hashcode/equals methods
4. Collections
5. Multithreading
6. Exception handling
7. Generics
8. Synchronisation
9. Serialisation & De-serialisation
10. Reflection

**WEB**

1. HTTP protocol and methods ( <https://developer.mozilla.org/ru/docs/Web/HTTP> )
2. Servlet/JSP basics ( <https://www.baeldung.com/intro-to-servlets> )
3. REST (<https://www.restapitutorial.com/>)

**SQL & Databases (MS SQL Server)**

1. SQL basics (<https://metanit.com/sql/postgresql/>)
2. Foreign keys and relationship (<https://habr.com/ru/post/193380/>)
3. Table relationship and joins (<https://metanit.com/sql/postgresql/6.1.php>)

**Spring/SpringBoot basic knowledge**

1. Spring core ([link](https://www.youtube.com/watch?v=IBNQ6whVHeI&list=PL6jg6AGdCNaWF-sUH2QDudBRXo54zuN1t&index=1), [some suitable tutorials](https://www.baeldung.com/spring-tutorial))
2. Request mapping (<https://www.baeldung.com/spring-requestmapping>)

**Core OOP Principles**

1. Abstraction ( <https://raygun.com/blog/oop-concepts-java/#abstraction> )
2. Encapsulation ( <https://raygun.com/blog/oop-concepts-java/#encapsulation> )
3. Inheritance ( <https://raygun.com/blog/oop-concepts-java/#inheritance> )
4. Polymorphism ( [https://raygun.com/blog/oop-concepts-java/#polymorphism](https://raygun.com/blog/oop-concepts-java/#encapsulation) )
5. Association ([https://raygun.com/blog/oop-concepts-java/#association](https://raygun.com/blog/oop-concepts-java/#encapsulation))
6. Aggregation ( [https://raygun.com/blog/oop-concepts-java/#aggregation](https://raygun.com/blog/oop-concepts-java/#encapsulation) )
7. Composition ( [https://raygun.com/blog/oop-concepts-java/#composition](https://raygun.com/blog/oop-concepts-java/#encapsulation) )

**Optional but desired**

1. Linux (writing bash scripts, configuration, installation)
2. Hibernate/MyBatis/JPA/Spring Data
3. Docker