

1. OOP en lenguajes tipados; definición de clases, objetos. Herencia.

Polimorfismo. Herramientas de Desarrollo

- a. <https://open-bootcamp.com/cursos/java/crear-clases>
- b. <https://www.arquitecturajava.com/java-encapsulamiento-y-reutilizacion/>
- c. <https://docs.oracle.com/javase/tutorial/java/landl/subclasses.html>
- d. <https://www.mygreatlearning.com/blog/polymorphism-in-java/>

2. Gestión de proyectos (Maven).

- a. <https://www.campusmvp.es/recursos/post/java-que-es-maven-que-es-el-archivo-pom-xml.aspx>

3. Interfaces. Colecciones.

- a. <https://docs.oracle.com/javase/tutorial/java/concepts/interface.html>
- b. <https://www.geeksforgeeks.org/java-collection-tutorial/>
- c. <https://jenkov.com/tutorials/java-collections/index.html>

4. Genéricos. Excepciones

- a. <https://www.baeldung.com/java-generics>
- b. <https://jenkov.com/tutorials/java-generics/index.html>
- c. <https://www.digitalocean.com/community/tutorials/java-generics-example-method-class-interface>
- d. <https://howtodoinjava.com/java/generics/complete-java-generics-tutorial/>
- e. <https://www.baeldung.com/java-exceptions>
- f. <https://www.digitalocean.com/community/tutorials/exception-handling-in-java>
- g. <https://www.geeksforgeeks.org/exceptions-in-java/>

5. Programación en hilos

- a. <https://www.geeksforgeeks.org/java-multithreading-tutorial/>
- b. <https://www.digitalocean.com/community/tutorials/multithreading-in-java>
- c. <https://jenkov.com/tutorials/java-concurrency/index.html>

6. Tests de unidad

- a. <https://www.vogella.com/tutorials/JUnit/article.html>
- b. <https://www.baeldung.com/junit>
- c. <https://www.digitalocean.com/community/tutorials/junit5-tutorial>

7. Uso de framework RAD. Inyección de dependencias; inversión de control

- a. <https://www.vogella.com/tutorials/DependencyInjection/article.html>
- b. <https://medium.com/groupon-eng/dependency-injection-in-java-9e9438aa55ae>
- c. <https://www.baeldung.com/inversion-control-and-dependency-injection-in-spring>
- d. <https://www.geeksforgeeks.org/spring-understanding-inversion-of-control-with-example/>
- e. <https://www.campusmvp.es/recursos/post/que-son-spring-framework-y-spring-boot-tu-primer-programa-java-con-este-framework.aspx>
- f. <https://www.arquitecturajava.com/que-es-spring-boot/>

8. Desarrollo de una aplicación CRUD. Uso de herramientas para consumir servicios. Documentación

- a. <https://www.baeldung.com/spring-boot-crud-thymeleaf>
- b. <https://www.geeksforgeeks.org/spring-mvc-crud-with-example/>
- c. <https://www.bezkoder.com/spring-boot-jpa-crud-rest-api/>
- d. <https://www.baeldung.com/swagger-2-documentation-for-spring-rest-api>
- e. <https://medium.com/javarevisited/api-documentation-using-swagger-3-with-spring-boot-2-spring-security-5a0d2b0996ee>

9. Uso de ORM; implementación de relaciones

- a. <https://medium.com/karibu-blog/c%C3%B3mo-aplicar-jpa-en-spring-boot-e45ac5bee3b4>
- b. <https://www.baeldung.com/the-persistence-layer-with-spring-data-jpa>
- c. <https://www.arquitecturajava.com/jpa-vs-spring-data-y-sus-diferencias/>
- d. <https://www.digitalocean.com/community/tutorials/spring-data-jpa>
- e. <https://www.baeldung.com/spring-data-rest-relationships>
- f. <https://medium.com/huawei-developers/database-relationships-in-spring-data-jpa-8d7181f50f60>

10. Gestión de transacciones

- a. <https://www.baeldung.com/transaction-configuration-with-jpa-and-spring>
- b. <https://vladmihalcea.com/spring-transaction-best-practices/>

11. Implementación de MVC; separación en capas

- a. <https://medium.com/@erwinalberto/part-3-spring-boot-components-controller-service-persistence-dao-7e8c8f1c844b>
- b. <https://www.geeksforgeeks.org/difference-between-component-repository-service-and-controller-annotations-in-spring/>
- c. <https://www.baeldung.com/spring-component-repository-service>

12. Aplicación de capa de seguridad

- a. <https://www.baeldung.com/spring-security-oauth-jwt>
- b. <https://blog.softtek.com/es/autenticando-apis-con-spring-y-jwt>
- c. <https://www.codejava.net/frameworks/spring-boot/spring-security-jwt-authentication-tutorial>
- d. <https://www.bezkoder.com/spring-boot-jwt-authentication/>
- e. <https://medium.com/geekculture/implementing-json-web-token-jwt-authentication-using-spring-security-detailed-walkthrough-1ac480a8d970>