# **Create Spring Boot Project**

For example using the spring-boot command line tool.

```
# install the spring-cli
brew tap spring-io/tap
brew install spring-boot

# initialize spring project

spring init --dependencies=web, data-jpa, flyway, postgresql, testcontainers, lombok, restdocs, validation \
--java-version 11 --package-name com.fcoach --name api springboot-postgres
# use 'spring init --list' to discover dependencies
```

# **Spring Data, JPA**

- Spring Data JPA
- Accessing Data with JPA

# **Spring Data Repository**

```
@Repository
public interface PlayerRepository
  extends JpaRepository<Player, Long> {

  List<Player> findPlayerByName(String name);
  Page<Player> findPlayerByBirthdayLessThanEqual
    (LocalDate since, Pageable pageable);
}
```

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#### **JPQL**

SQL like query language with Java objects support (dot notation).

```
@Query("select p from Player p where p.birthday >= :sinceDate")
List<Player> findPlayersBornSince(@Param("sinceDate") LocalDate since);
```

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# Integration Testing

- <u>Testcontainers</u>
- <u>Testcontainers Postgres Module Reference Guide</u>
- Non-docker alternative: H2 in memory DB