

//basic structure to follow:

// User.java (Entity)

```
import javax.persistence.*;
```

```
@Entity
```

```
public class User {
```

```
    @Id
```

```
    @GeneratedValue(strategy = GenerationType.IDENTITY)
```

```
    private Long id;
```

```
    private String name;
```

```
    private String email;
```

```
    // getters and setters
```

```
}
```

// UserRepository.java (Repository)

```
import org.springframework.data.jpa.repository.JpaRepository;
```

```
public interface UserRepository extends JpaRepository<User, Long> {
```

```
}
```

// UserService.java (Service)

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.stereotype.Service;
```

```
@Service
```

```
public class UserService {
```

```
    @Autowired
```

```
    private UserRepository userRepository;
```

```
    // business logic methods
```

```
}
```

```
// UserController.java (Controller)
```

```
import org.springframework.beans.factory.annotation.Autowired;
```

```
import org.springframework.web.bind.annotation.*;
```

```
@RestController
```

```
@RequestMapping("/api/users")
```

```
public class UserController {
```

```
    @Autowired
```

```
    private UserService userService;
```

```
    @GetMapping("/{id}")
```

```
    public User getUserById(@PathVariable Long id) {
```

```
        // logic to retrieve user by id
```

```
    }
```

```
    @PostMapping
```

```
    public User createUser(@RequestBody User user) {
```

```
        // logic to create a new user
```

```
    }
```

```
    @PutMapping("/{id}")
```

```
    public User updateUser(@PathVariable Long id, @RequestBody User user) {
```

```
        // logic to update user by id
```

```
    }
```

```
    @DeleteMapping("/{id}")
```

```
    public void deleteUser(@PathVariable Long id) {
```

```
        // logic to delete user by id
    }
}
```