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Reasons to develop Mini Projects in our course
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1) To understand requirements

2) Improve Analysis skills

3) Improve DB Design Skills (Data Modeling)

4) Improve Java Components Design Skills (classes & methods)

5) Improve Coding Skills

6) Improve Debugging Skills

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Mini Projects Development Process
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Step-1 : Trainer will explain requirement & will share Requirement Document with you.

Step-2 : Students should analyze the requriment & should ask questions if any.

Step-3 : Students should work on database design (data modeling).

Step-4 : Show your database analysis to trainer for checking.

Step-5 : Trainer will explain database design (You compare your db design with Trainer db design to find any gaps).

Step-6 : Students should work on Java Classes & Methods Analysis.

Step-7 : Trainer will explain analysis for Java Classes & Methods.

Step-8 : Students should work on coding part.

Step-9 : Trainer will develop the code from scratch

Step-10 : Identify the difference between your coding and trainer coding.

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01-Mini Project : Training Institute Counsellors Portal
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-> Counsellor is responsible to collect students enquries

-> Counsellor will enter student enquiry details in website (It is Open/New Enquiry).

-> Counsellor can check enquiries to follow up based on course/status/mode.

-> Counsellor will update enquiry status (Enrolled/Lost).

-> Counsellor can check performance report in dashboard

- total enquires handled
- Open Enquiries Count
- Enrolled Enquiries Count
- Lost Enquiries count

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Counsellors Portal Screens

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1) Registration Page

2) Login Page

3) Dashboard page

4) Add Enquiry

5) View Enquiries (with filter)

6) Edit and Update Enquiry

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Database Design
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1) counsellors_tbl

        counsellor_id (PK)
        name
        email (unique)
        pwd
        phno
        created_at
        updated_at

2) courses_offering

        course_id (PK)
        course_name

3) enquiries_tbl

        enq_id   (PK)
        stu_name
        stu_phno
        class_mode
        course_id   (FK)
        enq_status
        counsellor_id (FK)
        created_at
        updated_at

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Java Components
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1) Counsellor.java (Entity & DTO)
2) Enquiry.java (Entity & DTO)
3) Course.java (Entity & DTO)

4) CounsellorRepo.java
5) EnquiryRepo.java
6) CourseRepo.java

7) DashboardResponseDto.java
8) EnqFilterRequestDto.java

9) CounsellorService.java (I)
10) CounsellorServiceImpl.java

11) CourseService.java (I)
12) CourseServiceImpl.java

13) EnquiryService.java (I)
14) EnquiryServiceImpl.java

15) CounsellorController.java
16) EnquiryController.java

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View Pages
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1) index.html
2) register.html
3) dashboard.html
4) add-enq.html
5) view-enqs.html

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Technology Stack
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1) SpringBoot
2) Data JPA
3) Thymeleaf UI
4) MySQL DB

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Development Process
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1) Create springboot application with below dependencies

        a) web-starter
        b) thymeleaf
        c) data-jpa
        d) mysql-connector
        e) devtools
        d) project lombok

2) configure datasource properties in application.properties file

#Data Source Properties
spring.datasource.url=jdbc:mysql://localhost:3306/jrtp
spring.datasource.username=root
spring.datasource.password=root

#ORM Properties
spring.jpa.hibernate.ddl-auto=update
spring.jpa.show-sql=true
spring.jpa.properties.hibernate.format_sql=true

3) Create Entities with Association Mapping and Repository interfaces.

4) Create DTO classes

5) Create Service interfaces required methods.

6) Create Service Impl classes with business logic

7) Create Controllers to handle request and response

8) Create View pages with Presentation logic

9) Run the application and test it.