### Northwestern Polytechnic University, Fremont, CA





Fall 2017 COMPUTER SCIENCE CAPSTONE COURSE Health Plan Enrollment System

Team Members:

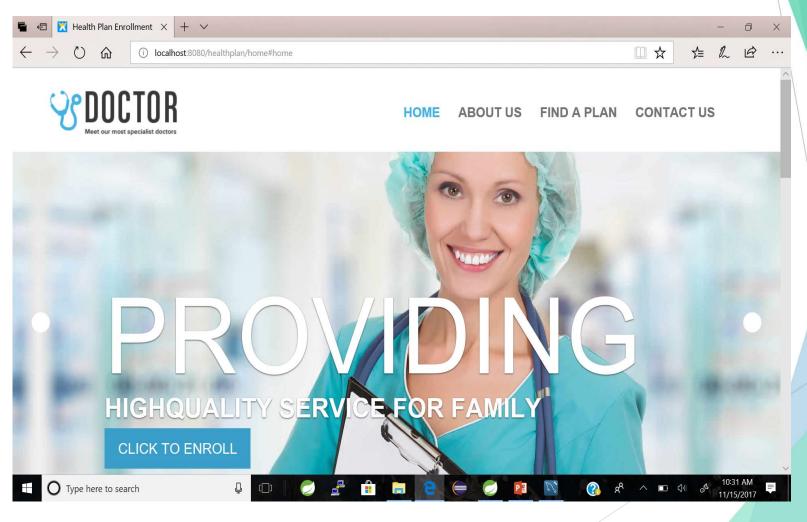
SUPRAVA PUHAN

JAVA DEVELOPER

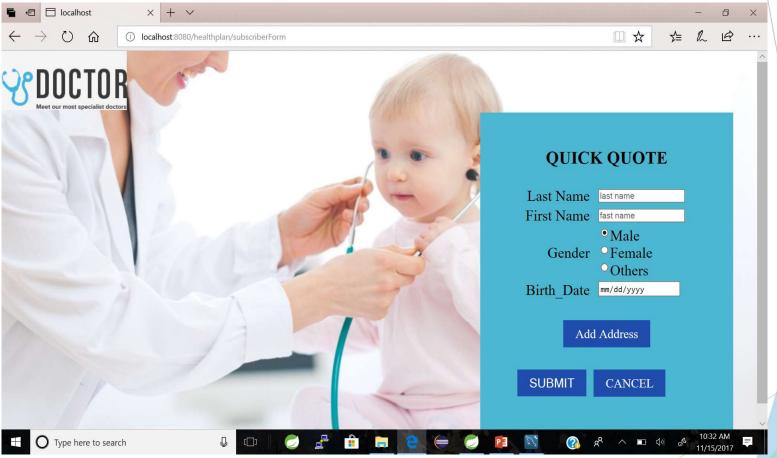
#### Data Flow Diagram Premium User Rate **Enroll** Terminate 1 Plan Subscriber Report Remove Add Address **Enrollment** Remove Add Members

Subscriber will add himself and dependents as member. The subscriber and the member address can be same or different. Based on that address will be updated. Each member should have enrolled in a health insurance plan. The plan information for each member will be available in Enrollment table.

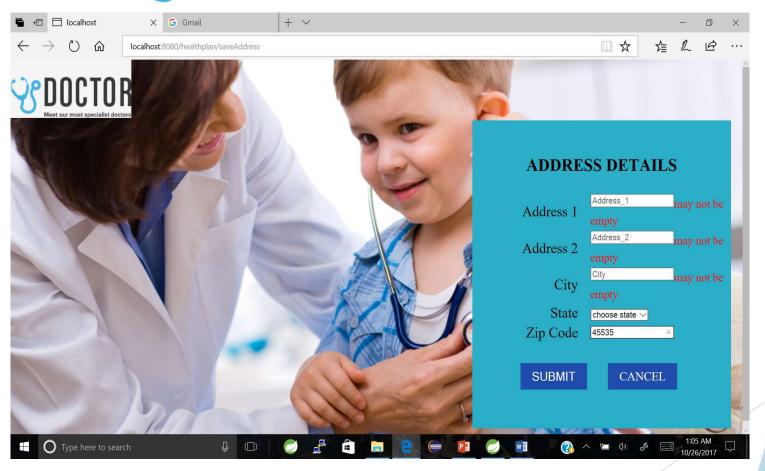






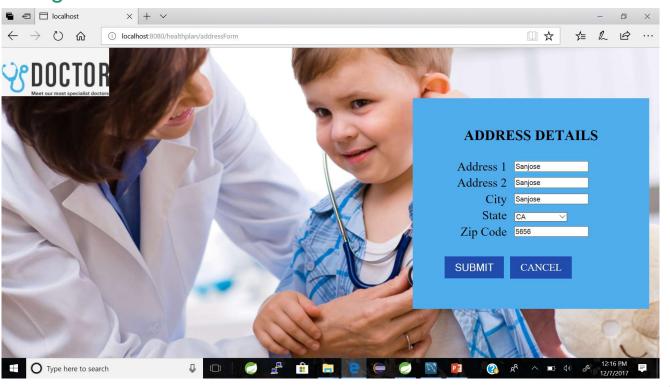


# **S**Address form validation



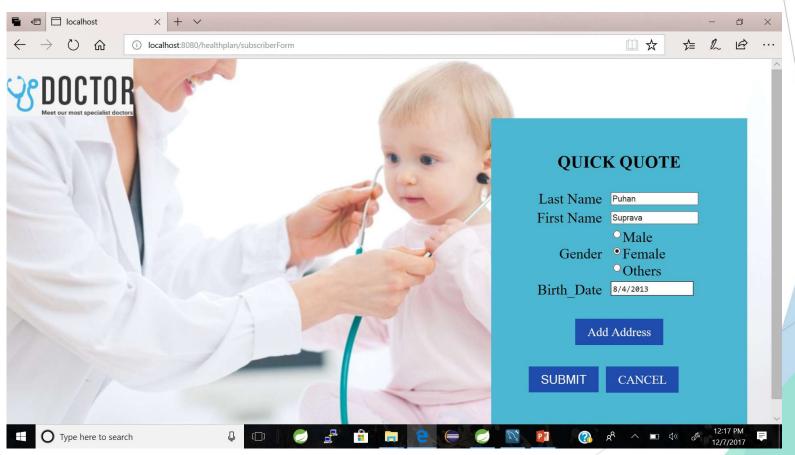


► Entering subscriber address details first before subscriber registration.

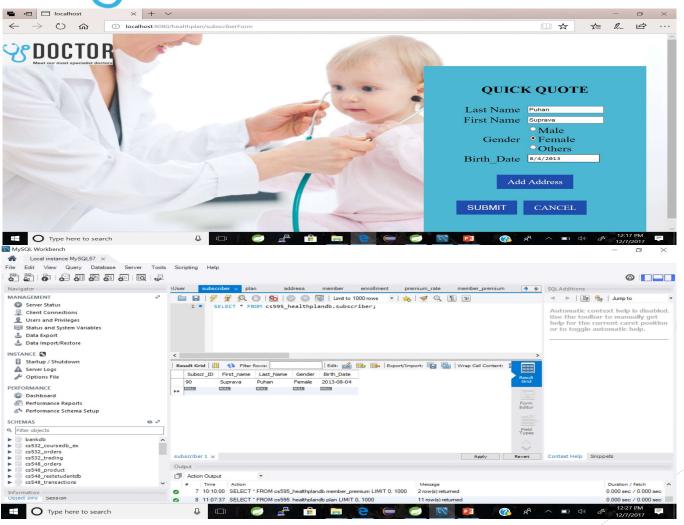


# Subscriber form details

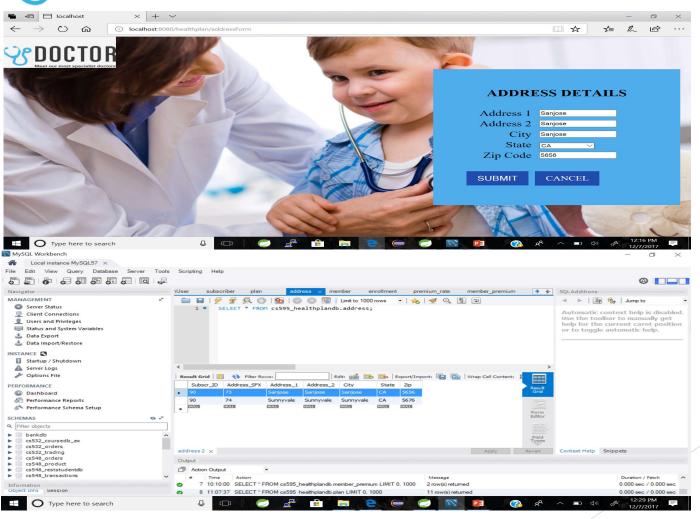
► After adding subscriber address it will be redirected to subscriber form to fill subscriber details.



# Cubscriber added In Database

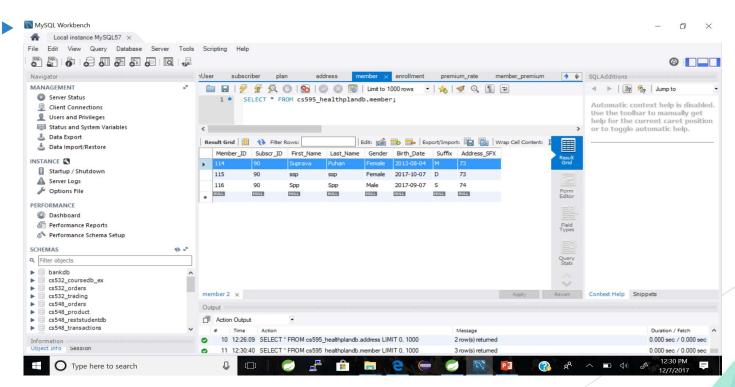


# \*\*Added subscriber address in database



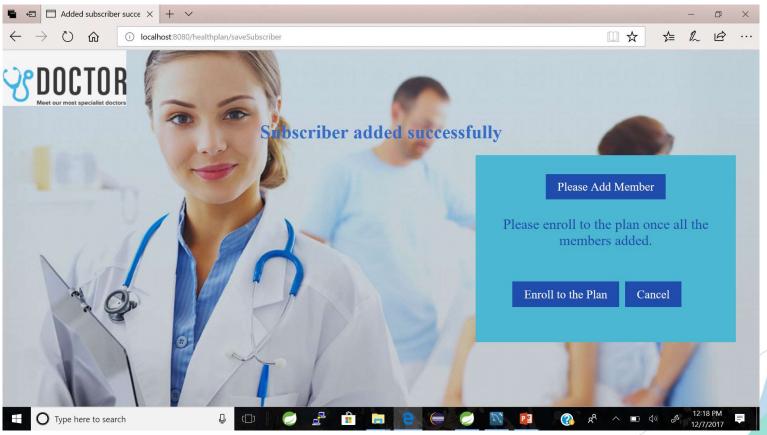
# Adding Subscriber as a Member into Database

After Subscriber added successfully, he/she himself will be added as a Member in the database by using the same subscriber details from the subscriber database with a unique member ID.

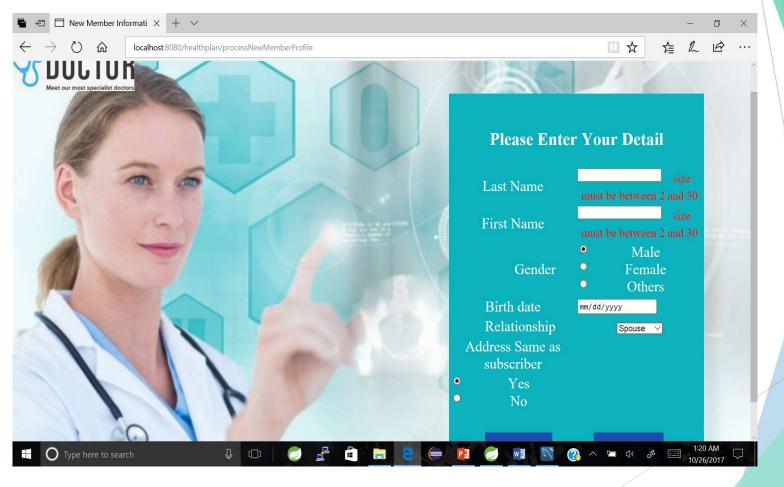


# Subscriber Add Success page

► After subscriber added successfully It will be redirected to success page where he/she will be asked to add member.







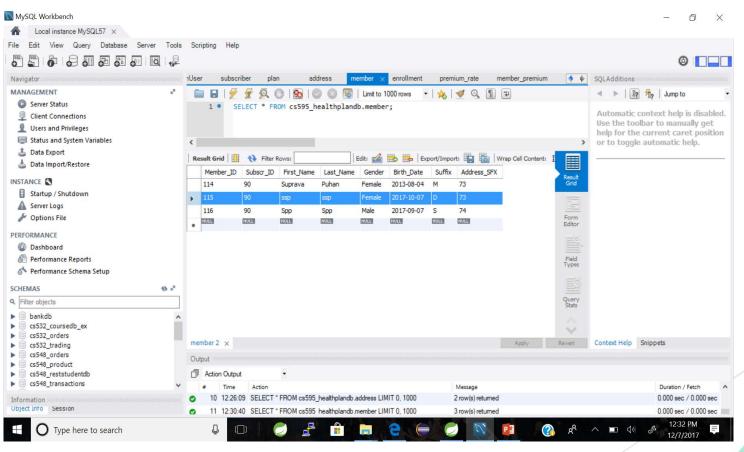


- ▶ While adding member a member can choose the same address as subscriber or he/she can add different address. If it chooses the different address then it will be redirected to address page where he/she can add new address details.
- ▶ If it chooses same as subscriber address then the member can use subscriber address suffix to identify his/her address. No address will be added into database.



#### Member added with the same subscriber address.

▶ Below member ID 12 is using the subscriber address suffix to identify the same address as subscriber.



### Adding member with different address

- ▶ If a member wants to give different address he can click the radio button **Address same as subscriber** as **No** . After clicking this it will be redirected to new address page where he can add his/her address details.
- ► After adding address it will be redirected to member page to fill his/her details. Below is the flow detail to add different address. Member chooses No...

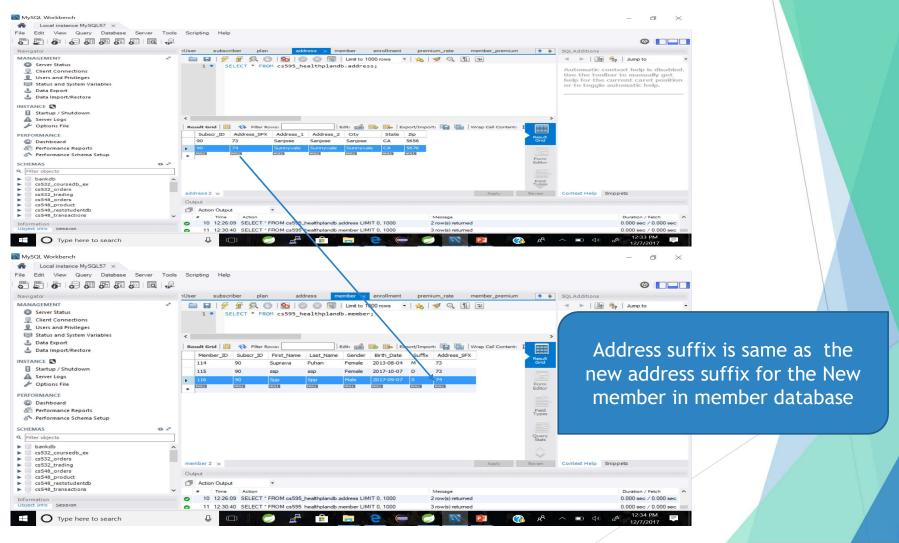


### Adding member with different address.

▶ After adding address a new address with different address suffix will be added in address table. Then member will be added using the same address suffix.



#### New Member addition with different address

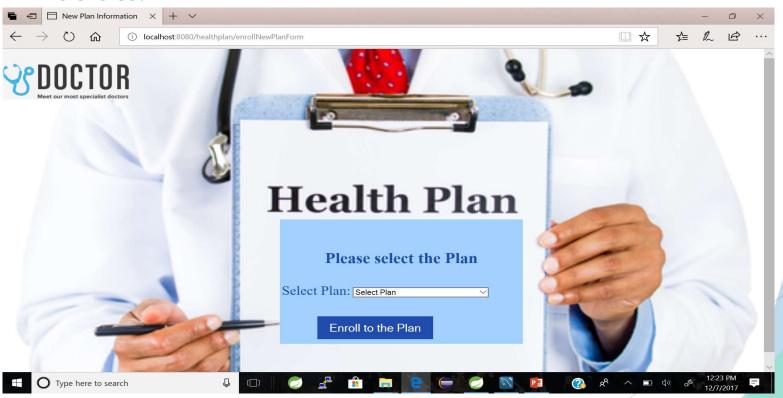


#### Continue...

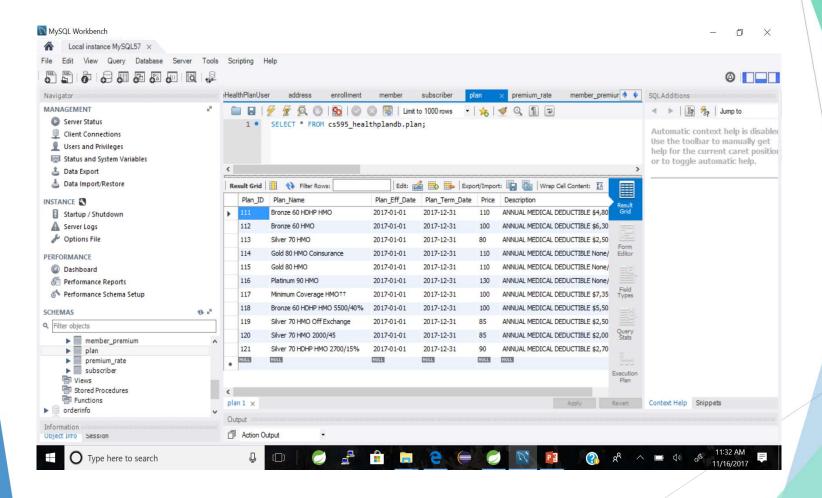
- ► Through the above process all the members/dependents of the subscriber will use the same subscriber ID to identify themselves to be the part of the same subscription.
- ➤ So that when the subscriber will enroll himself/herself into the plan the plan will be affected for all the members registered under the same subscriber.
- ▶ Also a member will use the same subscriber address suffix to identify his address is same as subscriber if it has choose the same address as subscriber. Else the member will be assigned a different address suffix while adding his address details which he/she can use that.

### Enrolling into a Plan Page

- ▶ All Plan information is stored and retrieved from database plan table .
- ▶ Below page shows the plan page where a subscribe can enroll himself/herself along with family members into a plan according to his choice.

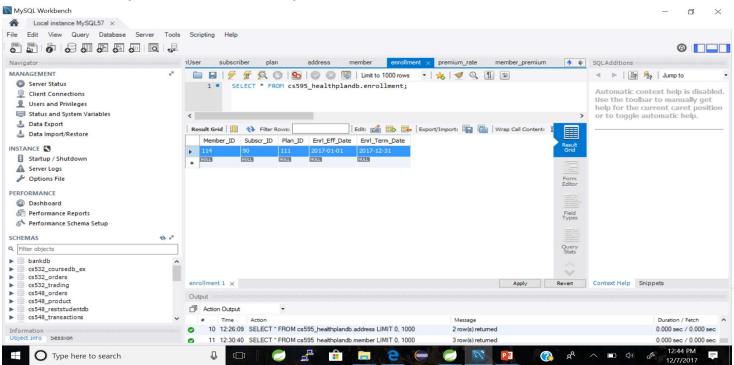


#### Plan Information in database



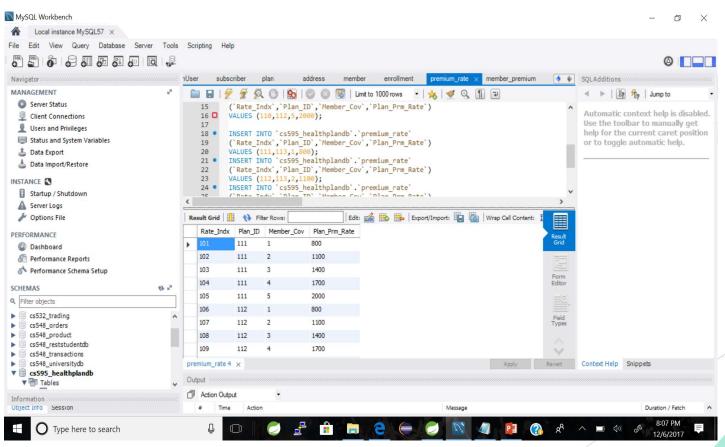
## Subscriber Enrolling into a plan

- Now the Subscriber can enroll himself into a plan by choosing a plan from the drop box .
- After clicking Enroll to the Plan the Subscriber now will enroll himself with his family members to a plan. Accordingly the enrollment table will be updated with the plan information.



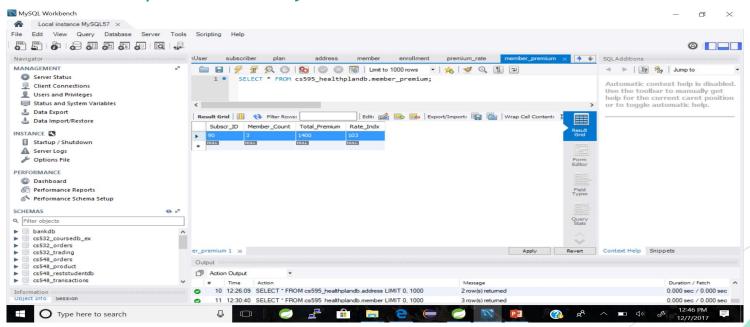
### Subscriber enrollment continued....

▶ After enrollment database update the subscriber will get the total plan amount detail from the premium rate table for himself/herself along with the family members to pay .



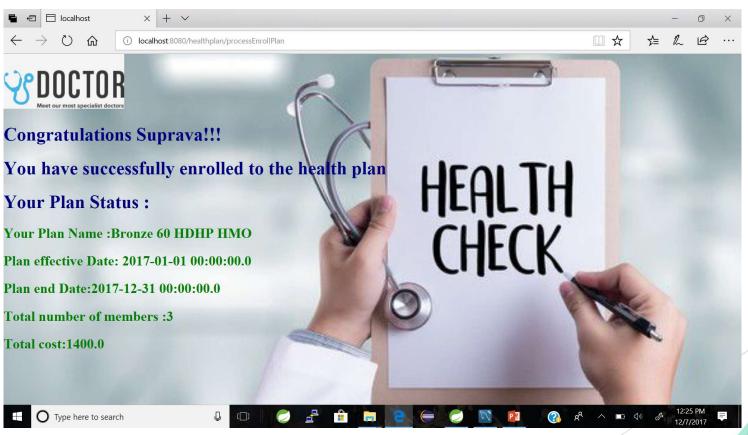
## Member\_Premium Database

- ► After getting the total amount of the plan and the number of members subscriber has enrolled, the member premium database will be updated .
- ▶ Below Member\_Premium database shows the details of the subscriber with the total amount he/she has to pay out of pocket for the insurance plan on monthly basis.



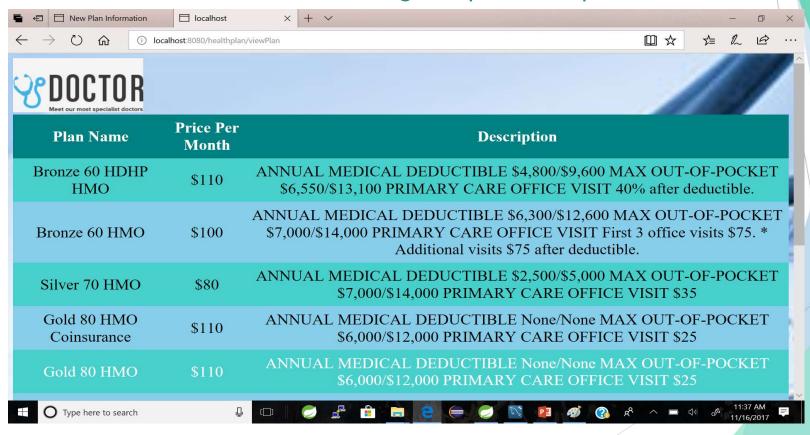
### Enrollment Success page with details

► After all process finished successfully the subscriber will get his Subscriber Id along with other details.



## Find a plan page

▶ Below page showing all plan details so that a subscriber can view these information before enrolling to a particular plan.



### Impleme

- - address.jsp
  - addressForm.jsp
  - addSubscriberSuccess.jsp
  - contactusconf.jsp
  - EnrollPlanSuccess.jsp
  - home.jsp
  - include.jsp
  - memberDataForm.jsp
  - PlanForm.jsp
  - subscriber.jsp
  - subscriberForm.jsp
  - viewPlan.jsp
- Implementation detail files
  - 🗸 😂 webapp
    - → Presources

.JSP Files

- ✓ B CSS
  - bootstrap.min.css
  - font-awesome.min.css
  - nav.css
  - style.css
- > 🗁 fonts
- > 🗁 img
- > 🗁 js

- > 🔠 HomeController.java
- > 15 MemberController.java
- > 🛂 PlanController.java
- SubscriberController.java
- 🕶 org.npu.healthplan.dao
  - AddressDao.java
  - > 🗗 EnrollPlanDao.java
  - > MemberDao.java
  - PlanDao.java
- - › If AddressDaoHibernateImpl.java
  - > Marcoli Plan Dao Hibernate Impl.java
  - > 🛂 MemberDaoHibernateImpl.java
  - > 🔠 PlanDaoHibernateImpl.java
  - > 

    SubscriberDaoHibernateImpl.java
- > # org.npu.healthplan.domain
- → ⊕ org.npu.healthplan.exceptions
- > # org.npu.healthplan.resthandlers
- → 
  → org.npu.healthplan.services
  - AddMemberService.java
  - > AddMemberServiceImpl.java
  - AddressService.java
  - > 🖪 AddressServiceImpl.java
  - > EnrollPlanService.java
  - EnrollPlanServiceImpl.java



# **%** Conclusion

- ► Implemented end to end database communication for adding subscriber, his/her address details along with his/her family member details with their address update into database.
- ► Implemented form validation for all the forms subscriber ,member and address page.
- ▶ Implemented the plan page for enrolling into the plan as well as find the plan page in home to see all the plan details.
- ► Introduced properties file for showing message in the form validation without hardcoding the message.
- ► Implemented the enrollment database update along with plan premium\_rate and member\_premium database update.
- Implemented the Enrollment success page which shows the subscriber enrollment details so that he can use this details to see his plan information in future.