# **Document of miniProject Layers**

**Persistent Layer**

ContactEntity.java

…………………….

public class ContactEntity{

private Integer id;

private String name;

private String email;

private Integer phNo;

//constructor

//getter and setter

}

IContactRepo.java

…………………….

public interface IContactRepo

extends JpaRepository<ContactEntity, Integer> { }

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**Service Layer**

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IContactService.java (I)

.....................................

public interface IContactService

{

// save Contact

public Integer saveContact(ContactEntity contactEntity);

// fetch all contacts

public List<ContactEntity> getAllContacts();

// delete contact by id

public void deleteContact(Integer id);

// update contact

public void updateContact(ContactEntity contactEntity);

}

..........................................

ContactServiceImpl.java (C)

............................................

@Service

public class ContactServiceImpl implements IContactService {

@Autowired

private IContactRepo repo; //HAS-A

public Integer saveContact(ContactEntity contactEntity)

{

//saveContact method implemented

}

public List<ContactEntity> getAllContacts()

{

//getAllContact method implemented

}

public void deleteContact(Integer id)

{

//deleteContact method implemented

}

public void updateContact(ContactEntity contactEntity)

{

//updateContact method implemented

}

}

**Controller**

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ContactController.java

.......................

@Controller

public class ContactController {

@Autowired

private IContactService service; //HAS-A

public String contactReg(){}

public String saveContact(){}

public String AllContactInfo(){}

public String deleteContact(){}

public String contactInfoEdit(){}

public String updateContact(){}

}

**Presentation Layer**

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1.Contact.jsp

2.viewContacts.jsp