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Major Project
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Types of Projects :

1) Internet Based Projects

Ex: Gmail, Facebook, IRCTC, Linkedin etc...

2) Intranet Based Projects (Portals)

Ex: Aadhar, SBI Money Transfer

Client : Rhode Island (State Govt)

Project Name : IES - Integrated Eligibility System

It is used to provide fully integrated eligibility System for RI state citizens.

By using IES application, RI is providing below health and insurance plans for RI state citizens.

1) SNAP (Supplemental Nutrition Assistance Program)
2) CCAP (Child Care Assistance Program)
3) Medicaid
4) Medicare (Senior Citizens, above 60 years)
5) QHP (Qualified Health Plan)
6) RIW (Rhode Island Works)

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=> DHS : Department of Health Services

=> DHS Employees : Case Workers

=> IES application will be accessible only in DHS offices

=> Caseworker will use IES application to provide benefits for Citizens.

=> Citizens should visit nearest DHS office to apply for plans. Citizen should talk to case worker to apply for Plan.

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In IES project we have below modules

1) Admin

2) CW Module

3) AR (Application Registration)

4) DC (Data Collection)

5) ED (Eligibility Determination)

6) CO (Correspondence Module)

7) BI (Benefit Issuance)

8) Reports

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Admin Module
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-> Admin is responsible to create accounts for case workers to access IES system.

-> Admin is responsible to create Plans

1) Case Worker Accounts Management (Create/Update/Delete/Retrieve)
2) Plans management (Create/Update/Delete/Retrieve)

1) Login
2) Dashboard
3) Edit Profile
4) Forgot Pwd

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AR Module
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=> AR stands for Application Registration

=> AR api will collect citizen basic information and it will verify Citizen belongs to RI state or not based on SSN (It will communicate with SSA-WEB API, which is federal gov project for verification).

=> If citizen belongs to RI state then application will be created for citizen to apply for the plan.

=> If citizen not belongs to RI state then application will not be created hence Citizen can't apply for the plan.

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DC Module
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=> DC stands for Data Collection

=> DC api is responsible to collect citizen data which is required to apply for the plan

1) Citizen details

2) Family details
3) Education Details
4) Employment Details
5) Income details
6) Kids Details etc....

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ED Module
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=> ED stands for Eligiblity Determination

=> ED is responsible to verify Citizen eligibility for the plan.

=> ED will execute Plan conditions with citizen data.

=> If citizen data matches with Plan conditions then citizen will be approved for the plan otherwise citizen will be denied for the plan.

Note: Approved citizens will get benefit amount from Govt.

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CO Module
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=> CO stands for Correspondence

=> This is responsible to send Notices to citizens regarding their plan eligibility

1) Approved Notice
2) Denied Notice
3) Termination Notice
4) Plan renewal Reminder
5) Missing Documents

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BI Module
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=> BI stands for Benefit Issuance

=> It is responsible to send benefit amount to approved citizens.

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Reports module
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-> It is used to generate reports in excel/pdf format with application data

1) Report Based on Plan Name

2) Report Based on Plan Status

3) Report Based on Duration (start date & end date)

4) Report based on Citizen Gender

1) What is IES
2) Why IES required
3) IES Client
4) How to access IES
5) IES Plans & Conditions
6) IES Modules
7) Purpose of Each Module in IES App

Mock Screens : http://iesapp.s3-website.ap-south-1.amazonaws.com/login.html

SSA Web API URL : http://65.2.166.5:8080/swagger-ui.html

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Admin API
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Table Name : IES_USER (It is used to store user account details)

USER_ID pk
FULL_NAME
USER_EMAIL
USER_PWD
USER_PHNO
USER_GENDER
USER_DOB
USER_SSN
ACTIVE_SW (Default : Y)
ACC_STATUS (Default : LOCKED)
ROLE_ID
CREATE_DATE
UPDATE_DATE
CREATED_BY (Foregin Key : user_id from IES_USER table)
UPDATED_BY (Foregin Key : user_id from IES_USER table)
ROLE_ID

Table name : IES_USER_ROLES (It is used to specify roles of our IES app)

ROLE_ID PK
ROLE_NAME

Table Name : IES_PLANS (It is used to store Plans of IES app)

PLAN_ID PK
PLAN_NAME

PLAN_START_DATE
PLAN_END_DATE
PLAN_CATEGORY
ACTIVE_SW (Defult : Y)
CREATED_BY (Foregin Key : user_id from IES_USER table)
UPDATED_BY (Foregin Key : user_id from IES_USER table)
CREATED_DATE
UPDATED_DATE

Table name : IES_APPS (It is used to store citizen application details)

CASE_NUM PK
NAME
EMAIL
PHNO
DOB
SSN
STATE_NAME
CITY_NAME
HOUSE_NUM
CREATED_BY (Foregin Key : user_id from IES_USER table)
CREATED_DATE

Table : DC_PLAN_SELECTION (it is used to store citizen selected plan info)

plan_selection_id PK
case_num
plan_id

Table : DC_INCOME (It is used to store citizen income info)

income_id PK
salary_income
rent_income
property_income
case_num FK

Table : DC_CHILDREN (It is used to store citizen childrens info)

child_id PK
child_name
child_dob
child_ssn
case_num FK

Table : DC_EDUCATION (it is used to store citizen education info)

education_id PK
highest_degree
graduation_year

university
case_num FK

Table : ED_ELIG_DTLS (It is used to store citizen eligibility details)

ed_trace_id PK
case_num FK
plan_name
plan_status
elig_start_date
elig_end_date
benefit_amt
denial_reason
created_date

Table : CO_NOTICES (This is used to store citizen notices)

notice_id PK
case_num FK
ed_trace_id FK
co_pdf blob
print_date
notice_status (P or H) (default : P)
created_date

Table : BI_INFO (It will maintain citizen benefits status)

benefit_id PK
case_num FK
benefit_month_year
benefit_amt
transaction_date
transaction_status

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1) Diff constructor and method

2) What is serialization

3) How to handle exceptions in java

4) List Vs Set

5) What is Synchronization

6) try-catch with throws keyword in single method

7) Difference between throw and throws

8) Seriailzable interface is part of which package ?

9) OOPS Concepts

10) What is IOC container in Spring ?

11) What is loosely coupling and tightly coupling ?

12) What are access modifieres in java

13) What is the use of Postman ?

14) Program to write toggle a string (uppercase to lowercase & vice versa)

Input : AshokIT
Output : aSHOKit

15) What is Dependency Injection & How many ways we can do that ?

16) Write a java program to find smallest elements which are right side for each element

String ar[] = {"11", "2" , "5", "10", "4"}

17) Write a java program to find third highest value in the given array

int[] ar = {1, 6, 1, 7, 1, 6, 9, 8, 7, 9}

18) Frequency of digits in given number

input : 79668

19) Which annotations you are using in Spring Boot ?

20) How to implement Serialization with Code ?

21) How to say the class is Parent ?

22) What is Marker Interface in Java ?

23) What is JIRA ?

24) What is use of GIT HUB?

25) Why we need to use Debugging ?

26) Overloading Vs Overriding

27) Comparable Vs Comparator

28) Stream API

29) SDLC

30) Maven Goals

31) Which Spring Cloud Version you are using ?

32) Virtual DOM

33) React JS Features

34) JSX with Example

35) Angular Vs React

36) Components Life Cycle

37) How to develop React Application

38) What is POJO ?

39) Difference between Local and instance variables ?

40) What are this and super keywords ?

41) Exception vs Error

42) Keywords to handle Exception in java ?

43) What are the annotation available in java ?

44) REST API annotations

45) Array vs ArrayList

46) What is Multi Threading ?

47) How to achieve Synchronization ?

48) List out some unchecked exceptions

49) How lombok will generate setters & getters

50) Collections framework vs Collection (I) vs Collections (C)

51) What is REST API ?

52) Difference between Access specifiers and Access modifiers ?

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