**Design Service Layer**

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Project : Insurance application

MVP : New Policy creation feature. Underwriter Approval feature, and Insurance Card generation

Stretch: Administration screen and create new user.

**Service endpoints identified for MVP**

POST /api/insuredinfo

Description: creates Insured Account record and inserts a record in address table and will establish a relation between these two records.

Location in the UI this endpoint will be called: This will be called during the submission of “Create New Insured” form. Below is the sample screen from where this call will get originated.

Graphical user interface, table

Description automatically generated with medium confidence

Personas that use this: Underwriters or UWAssistants

Parameter Content Type: application/json

Response Content Type: application/json

Sample request

{

        "firstName": "Alexander",

        "lastName": "P",

        "email": "Alex@gmail.com",

        "gender": "male",

        "dob": "1970-10-31T03:51:00.752Z",

        "line1": "19 colgate dr",

        "city": "morris",

        "state": "nj",

        "zipCode": 17960}

Response

{

    "id": 6,

    "line1": **null**,

    "line2": **null**,

    "city": "morris",

    "state": "nj",

    "zipCode": **null**,

    "InsuredAccountId": 6,

    "updatedAt": "2021-11-03T04:31:31.484Z",

    "createdAt": "2021-11-03T04:31:31.484Z"

}

Code descriptions

200 OK

400 Some required fields are missing in the data, please verify

500 Error occurred while creating Insured

Sample bad request

{

        "firstName": "",

        "lastName": "P",

        "email": "Alex@gmail.com",

        "gender": "male",

        "dob": "1970-10-31T03:51:00.752Z",

        "line1": "19 colgate dr",

        "city": "morris",

        "state": "nj",

        "zipCode": 17960}

Response

{

    "message": "Some required fields are missing in the data, please verify"

}

Sample postman screenshot

Graphical user interface, text, application, email

Description automatically generated

2.

**GET** /api/insured/:id

Description: This returns the insured record for a given insured primary key. This is needed to show the Insured information in few columns on the Home page. The same information will be used while generating the Policy Document.

Location in the UI this endpoint will be called: This will be called on landing on the “Home Page” as soon as user logins. It is needed for the highlighted areas.

Table

Description automatically generated

Personas that use this: Underwriters or UWAssistants

Parameter Content Type: application/json

Response Content Type: application/json

Sample Response

{

    "id": 1,

    "firstName": "Murali",

    "lastName": "G",

    "email": "meet@gmail.com",

    "gender": "Male",

    "dob": "2019-10-31T03:51:00.752Z",

    "createdAt": "2021-10-31T03:51:21.435Z",

    "updatedAt": "2021-10-31T03:51:21.435Z"

}

Code descriptions

200 OK

400 Some required fields are missing in the data, please verify

Response

{

    “message": “There is no Insured with the given primary key"

}

Graphical user interface, text, application, email

Description automatically generated

3.

**GET /api/insuredinfo**

Description: This returns all of the insured records along with their address records This is needed to show all the Insureds on the Insured Account page.

Location in the UI this endpoint will be called: This will be called on landing on the “Insured Accounts Page” as soon as user clicks the link.

Graphical user interface, application

Description automatically generated

Table

Description automatically generated

Personas that use this: Underwriters or UWAssistants

Parameter Content Type: application/json

Response Content Type: application/json

Sample Response

[

    {

        "id": 1,

        "firstName": "Murali",

        "lastName": "G",

        "email": "meet@gmail.com",

        "gender": "male",

        "dob": "2019-10-31T03:51:00.752Z",

        "createdAt": "2021-10-31T03:51:21.435Z",

        "updatedAt": "2021-10-31T03:51:21.435Z",

        "Addresses": [

            {

                "id": 1,

                "line1": "19 colgate dr",

                "line2": **null**,

                "city": "morris",

                "state": "nj",

                "zipCode": 7960,

                "createdAt": "2021-10-31T03:51:21.559Z",

                "updatedAt": "2021-10-31T03:51:21.559Z",

                "InsuredAccountId": 1

            }

        ]

    }]

Code descriptions

200 OK

500 something gone wrong with the request, please verify

Response

{

    “message": “something gone wrong with the request, please verify "

}

Graphical user interface, text, application, email

Description automatically generated

4.

POST /api/newpolicy

Description: creates new policy record, inserts a record in vehicle table, inserts a record in Coverage table and will establish a relation between all of these records. It will also associate the user record and policy record (the logged user that created this policy gets associated with the policy). All of these happen in a single shot suing sequelize ORM.

Location in the UI this endpoint will be called: This will be called during the submission of “New Policy” form. Below is the sample screen from where this call will get originated.

Graphical user interface, text, application

Description automatically generated

Personas that use this: Underwriters or UWAssistants

Parameter Content Type: application/json

Response Content Type: application/json

Sample request

    {

        "policyNumber": "CAR12345",

        "premium": 4000,

        "policyStart": "2019-10-31T03:51:56.755Z",

        "policyEnd": "2021-10-31T03:51:56.755Z",

        "status": **null**,

        "requireUWApprovalInd": **true**,

        "isUWApprovedInd": **true**,

        "InsuredAccountId": 1,

        "UserId": 1,

        "Vehicles": [

            {

                "year": 2021,

                "vin": "hkh",

                "make": "kjhjkh",

                "model": "hkjhjk",

                "mileage": "7868"

            }

        ],

        "Coverages": [

            {

                "bodilyInjuryCovInd": **true**,

                "propertyDmgCovInd": **null**,

                "medPayCovInd": **null**,

                "collisionCovInd": **null**,

                "unCovInd": **null**,

                "underInsCovInd": **true**

            }

        ]

    }

Response

{

    "id": 6,

    "policyNumber": "CAR12345",

    "premium": 4000,

    "policyStart": "2019-10-31T03:51:56.755Z",

    "policyEnd": "2021-10-31T03:51:56.755Z",

    "status": **null**,

    "requireUWApprovalInd": **true**,

    "isUWApprovedInd": **true**,

    "InsuredAccountId": 1,

    "UserId": 1,

    "updatedAt": "2021-11-03T04:31:31.484Z",

    "createdAt": "2021-11-03T04:31:31.484Z"

}

Code descriptions

200 OK

400 Some required fields are missing in the data, please verify

500 Error occurred while creating Insured

Sample bad request

{

        "policyNumber": "",

        "premium": 4000,

        "policyStart": "2019-10-31T03:51:56.755Z",

        "policyEnd": "2021-10-31T03:51:56.755Z",

        "status": **null**,

        "requireUWApprovalInd": **true**,

        "isUWApprovedInd": **true**,

        "InsuredAccountId": 1,

        "UserId": 1,

        "Vehicles": [

            {

                "year": 2021,

                "vin": "hkh",

                "make": "kjhjkh",

                "model": "hkjhjk",

                "mileage": "7868"

            }

        ],

        "Coverages": [

            {

                "bodilyInjuryCovInd": **true**,

                "propertyDmgCovInd": **null**,

                "medPayCovInd": **null**,

                "collisionCovInd": **null**,

                "unCovInd": **null**,

                "underInsCovInd": **true**

            }

        ]

    }

Response

{

    "message": "Some required fields are missing in the data, please verify"

}

5.

PATCH /api/uwapproval

Description: The sets the Underwriter decision on the policy (either approval or rejection).

Location in the UI this endpoint will be called: This will be called when underwriter hits either “Approve” or “Reject” button on the “UW Approval” screen for a policy.

Table

Description automatically generated

Personas that use this: Underwriters only

Parameter Content Type: application/json

Response Content Type: application/json

Sample request

    {"id":1,"isUWApprovedInd":**true**}

Response

[1,[{"id":1,"policyNumber":"CAR318536","premium":2000,"policyStart":"2019-10-31T03:51:56.755Z","policyEnd":"2021-10-31T03:51:56.755Z","status":null,"requireUWApprovalInd":true,"isUWApprovedInd":true,"createdAt":"2021-10-31T03:52:15.777Z","updatedAt":"2021-11-03T05:21:32.007Z","InsuredAccountId":1,"UserId":1}]]

Code descriptions

200 OK

400 Some required fields are missing in the data, please verify

500 Error occurred while creating Insured

Sample bad request

{"id":,

"isUWApprovedInd":**true**

Response

{

    "message": "Some required fields are missing in the data, please verify"

}

Graphical user interface, text, application, email

Description automatically generated

6.

**GET /api/uwapproval**

Description: This returns all the policies that require UW decision.

Location in the UI this endpoint will be called: This will be called on landing on the “UW Approval Page” as soon as user clicks the link. The retrieved information will be shown in a table on the UI.

Graphical user interface, application

Description automatically generated

Table

Description automatically generated

Personas that use this: Underwriters

Parameter Content Type: application/json

Response Content Type: application/json

Sample response

[

    {

        "id": 4,

        "policyNumber": "CAR316100",

        "premium": 2000,

        "policyStart": "2020-11-02T06:56:47.949Z",

        "policyEnd": "2021-11-02T05:56:47.950Z",

        "status": **null**,

        "requireUWApprovalInd": **true**,

        "isUWApprovedInd": **null**,

        "createdAt": "2021-11-02T05:57:07.926Z",

        "updatedAt": "2021-11-02T05:57:07.926Z",

        "InsuredAccountId": 1,

        "UserId": 1,

        "Vehicles": [

            {

                "id": 4,

                "year": 2020,

                "vin": "gjhkh",

                "make": "ui",

                "model": "khk",

                "mileage": "76",

                "createdAt": "2021-11-02T05:57:07.938Z",

                "updatedAt": "2021-11-02T05:57:07.938Z",

                "AutoPolicyId": 4

            }

        ]

    }

]

Code descriptions

200 OK

500 Error occurred while retrieving the data

Sample response

{

    "message": "Error occurred while retrieving the data "

}

Graphical user interface, text, application, email

Description automatically generated

\*\*\*\*\*\*\*stretch end points \*\*\*\*\*\*\*\*

7.

**GET /api/user**

Description: This returns all the users of the app for the Administrator to view.

Location in the UI this endpoint will be called: This will be called on landing on the “Administration Page” as soon as Administration clicks the link. This information will be shown in the tabular form in the UI.

Graphical user interface, text, application

Description automatically generated

Table

Description automatically generated

Personas that use this: Admin

Parameter Content Type: application/json

Response Content Type: application/json

[{

        "id": 1,

        "firstName": "Sarah",

        "lastName": "Jones",

        "userName": "jsarah",

        "roleName": "Underwriter",

        "password": "jsarah",

        "createdAt": "2021-10-31T03:50:50.635Z",

        "updatedAt": "2021-10-31T03:50:50.635Z"

    },

    {

        "id": 2,

        "firstName": "Adam",

        "lastName": "Northrup",

        "userName": "nadam",

        "roleName": "UWAssitant",

        "password": "nadam",

        "createdAt": "2021-10-31T03:50:50.635Z",

        "updatedAt": "2021-10-31T03:50:50.635Z"

    }]

200 OK

500 Error occurred while retrieving the data

Sample response

{

    "message": "Error occurred while retrieving the data "

}

Graphical user interface, text, application

Description automatically generated

8.

POST /api/user

Description: Creates new user record, inserts a record in user table.

Location in the UI this endpoint will be called: It gets called on the submission of the user creation form.

Graphical user interface, application

Description automatically generated

Personas that use this: Administrator

Parameter Content Type: application/json

Response Content Type: application/json

Sample request

    {"firstName": "Alex",

"lastName": "James",

"userName": "ajames",

"roleName": "Underwriter",

"password": "ajames"}

Response

{

    "id": 5,

    "userName": "ajames",

    "firstName": "Alex",

    "lastName": "James",

    "password": "ajames",

    "roleName": "Underwriter",

    "updatedAt": "2021-11-03T05:59:50.369Z",

    "createdAt": "2021-11-03T05:59:50.369Z"

}

Code descriptions

200 OK

400 Some required fields are missing in the data, please verify

500 Error occurred while creating Insured

Sample bad request

{"firstName": "",

"lastName": "James",

"userName": "ajames",

"roleName": "Underwriter",

"password": "ajames"}

Response

{

    "message": "Some required fields are missing in the data, please verify"

}

Graphical user interface, text, application, email

Description automatically generated