**Domain**: Home Insurance

**Application Name**: Home Insurance Policy Recommender

#### Abstract:

There are many home insurance policies that clients must choose from, which can be very confusing for the client.

This application, typically recommends the most suitable insurance policy for a property owned by a client.

The system asks the user for certain inputs and recommends the policy they can use for their house. There are around 9 home insurance policies, out there in the market and this application recommends the home insurance policy that best suits their house based on the inputs the user gives.

#### **Features:**

- The application starts off by asking the user's name and displays a welcome message.
- It then asks for the kind of property; the user intends to purchase insurance for.
- Depending on the answer of the input, it recommends a suitable home insurance policy.
- It asks if the user lives in a coastal area and the user's budget.
- Depending on all the input parameters of a user, the application recommends the best suited home insurance policy for their home.

### **Rules and Description:**

- **print-banner**: Asks for the user's name and displays a welcome message
- **starter**: This rule asks, "What Property the user wants to insure".

The answer of the user is asserted into the system, as facts.

- **HO-4**: This rule is fired when HO-4 insurance policy fits all the user's need.
  - Typically, this insurance is for rented homes
  - It recommends HO-4 policy and gives a brief description about the same.
- **HO-7**: This rule is fired when, the user seeks insurance for a mobile or a manufactured home. It recommends HO-7 insurance policy and describes it.
- HO-6: This rule fires when the user seeks insurance for a condominium.
  - It briefly describes the coverage of this insurance policy.
- **HO-8**: This rule recommends the HO-8 home insurance policy.
  - It is fired when the user seeks insurance for a historic home or a registered landmark.
- **PrivateHome**: This rule is fired when the user answers "House" when the rule **starter** is fired.

  The system asks the user if they live in a coastal area. The user's answer is asserted as a fact in the system.
- **HO**: This rule is fired if the user answers "House" in the rule **starter** and "yes" in the rule **PrivateHome.** 
  - This rule recommends HO home insurance policy for houses in the coastal areas, and briefly describes the policy.
- **IBudget**: This rule is fired if the user answers "House" in the rule **starter** and "no" in the rule **PrivateHome.** It asks the user their budget range. The user's answer is asserted in the system as facts.

- **HO-1**: This rule is fired if the user answers "Below927" in the rule **IBudget**.
  - This rule recommends HO-1 home insurance policy, which is the basic home insurance home insurance policy and briefly describes it.
- **HO-2**: This rule is fired if the user answers "Below1027" in the rule **IBudget**.
  - This rule recommends HO-2 home insurance policy, and mentions what is covered by it.
- **HO-3**: This rule is fired if the user answers "Below2027" in the rule **IBudget**.
  - This rule recommends HO-3 home insurance policy, and mentions what it covers
- **HO-5**: This rule is fired if the user answers "Below3027" in the rule **IBudget**.
  - This rule recommends HO-5 home insurance policy, and mentions what it covers

Note: This application is a prototype and the budget used in the rule IBudget are only estimated figures and are not accurate.

## User Manual-Instructions to run the application

- This application can be executed from the command prompt or from eclipse.
- The file is called HIrules.clp
- To run on command prompt, type (batch Hirules.clp) .
- To run on Eclipse, create a new java project
- In the source folder, right click in the src folder->new->file.
- Name the file HIrules.clp.
- Copy the contents of my file HIrules.clp into the file that you created.
- Now press the green run button, at the top to run the application.
- You can also press Run->run in eclipse. Run menu is present on the top or press ctrl + F11
- After you run the program, the system will ask you to enter your name.
- Then it will display a welcome message and ask you what kind of property you want to insure.
- Your options will be as follows:
  - Enter House if you own a private home
     Enter Condo if you own a condominium
     Enter Rented if you seek insurance for your rented house
     Enter Mobile if you own a mobile or a manufactured home
     Enter Historic if you own a historic home or a registered landmark
- You must enter only one of the above options, that is, you can enter either House or Condo or Rented or Mobile or Historic.

Note: Do not enter any option other than the options that are mentioned above. These are the facts being asserted in the system, according to which the rules will fire. If any other value is entered, the rules will not fire and the corresponding output-which is the house insurance policy recommendation will not be displayed.

- If you enter House, the system asks you if you live in a coastal area.
- You can enter either yes or no.

Note: Do not enter any option other than the options that are mentioned above. These are the facts being asserted in the system, according to which the rules will fire. If any other value is entered, the rules will not fire and the corresponding output-which is the house insurance policy recommendation will not be displayed.

• The system gives the most appropriate Home Insurance Policy based on the inputs of the user, as shown below.

```
House
Do you live in a coastal area ?
Enter yes if you live in a coastal area
```

```
yes
Recommendation:
Choose HO
HOB form typically provides more coverage against
water damage for coastal areas of the U.S.
A HOB policy may also cover things like garden tractors, boat and boat trailers, lawn mowers,
and other similar accessories while they're on your property.
```

• If you enter no, the system asks you, your budget for the insurance and gives four options as below, to choose from

```
House
Do you live in a coastal area ?
Enter yes if you live in a coastal area
Enter no if you do not live in a coastal area

no
What is your annual budget ?
1.Enter Below927 if your Budget is below 927
2.Enter Below1027 if your budget is below 1027
3.Enter Below2027 if your budget is below 2027?
4.Enter Below3027 if your budget is below 3027
```

 You can enter any of the above options, either Below927 or Below1027 or Below2027 or Below3027

Note: Do not enter any option other than the options that is mentioned above. These are the facts being asserted in the system, according to which the rules will fire. If any other value is entered, the rules will not fire and the corresponding output-which is the house insurance policy recommendation will not be displayed.

- There are typically 9 types of home insurance policies.
- Depending on the inputs of the user, the system recommends the most suitable policy.

### **Output samples:**

Below are the output samples of the application:

Type your name and press Enter> PersonA

• Image1-Welcome message after typing the user's name and House is chosen

```
Hello, PersonA.
 Welcome to the Home Insurance Policy Recommender
Please answer the questions and
 I will tell you which housing insurance policy
 is the most suitable for your beautiful home!
What property do you want to insure?
1.Enter House if you own a private home
2.Enter Condo if you own a condominium
3.Enter Rented if you seek insurance for your rented house
4.Enter Mobile if you own a mobile or a manufactured home
5.Enter Historic if you own a historic home or a registered landmark
Do you live in a coastal area ?
Enter yes if you live in a coastal area
Enter no if you do not live in a coastal area
Recommendation:
Choose HO
```

#### Image2-House is chosen

```
What property do you want to insure?
1.Enter House if you own a private home
2.Enter Condo if you own a condominium
3.Enter Rented if you seek insurance for your rented house
4. Enter Mobile if you own a mobile or a manufactured home
5.Enter Historic if you own a historic home or a registered landmark
Do you live in a coastal area ?
Enter yes if you live in a coastal area
Enter no if you do not live in a coastal area
What is your annual budget ?
1.Enter Below927 if your Budget is below 927
2.Enter Below1027 if your budget is below 1027
3.Enter Below2027 if your budget is below 2027
4.Enter Below3027 if your budget is below 3027
Below2027
Recoomendation:
Choose HO-3
HO-3 doesn't limit coverage only to named perils, it often can provide more financial protection than an HO-2.
Your typical HO-3 form can financially protect you against any and all perils unless your policy
specifically mentions them in the exclusions - and if it doesn't,
```

#### Image3-Condo is chosen

5.Enter Historic if you own a historic home or a registered landmark

## Condo

#### Recommendation :

Choose HO-6

This type of policy is designed specifically for condo owners and financially protects belongings and personal liability. An HO-6 policy, also known as condo insurance, also typically extends to the walls, floors, and ceiling of the unit too.

The same incidents covered under a typical homeowners insurance policy generally apply to HO-6 coverage too. The rest of the condo's structure is usually covered by a policy purchased by the homeowner's association.

• Image4-Rented is chosen

# Jess Version 7.1p2 11/5/2008 This copy of Jess will expire in 1806 day(s). Type your name and press Enter> PersonA \*\*\*\*\*\*\*\* Hello, PersonA. Welcome to the Home Insurance Policy Recommender Please answer the questions and I will tell you which housing insurance policy is the most suitable for your beautiful home! What property do you want to insure? 1.Enter House if you own a private home 2.Enter Condo if you own a condominium 3.Enter Rented if you seek insurance for your rented house 4.Enter Mobile if you own a mobile or a manufactured home 5.Enter Historic if you own a historic home or a registered landmark Rented Recommendation: Choose HO-4 It covers only belongings and personal liability and not the building structure Typically, the building structure's insurance is bought by the house owner Image5-Mobile is chosen This copy of Jess will expire in 1806 day(s). Type your name and press Enter> PersonA \*\*\*\*\*\*\*\*\*\* Hello, PersonA. Welcome to the Home Insurance Policy Recommender Please answer the questions and I will tell you which housing insurance policy is the most suitable for your beautiful home! \*\*\*\*\*\*\*\* What property do you want to insure? 1.Enter House if you own a private home 2.Enter Condo if you own a condominium 3.Enter Rented if you seek insurance for your rented house 4. Enter Mobile if you own a mobile or a manufactured home 5.Enter Historic if you own a historic home or a registered landmark Mobile Recommendation : The mobile home form, HO-7 is essentially the same as an HO-3, but is designed specifically for

mobile or manufactured home, which don't fall under regular homeowners insurance

```
• Image6-Historic is chosen
                           .c in 1000 aay(3).
Type your name and press Enter> PersonA
Hello, PersonA.
Welcome to the Home Insurance Policy Recommender
Please answer the questions and
I will tell you which housing insurance policy
is the most suitable for your beautiful home!
*******
What property do you want to insure?
1.Enter House if you own a private home
2.Enter Condo if you own a condominium
3.Enter Rented if you seek insurance for your rented house
4.Enter Mobile if you own a mobile or a manufactured home
5.Enter Historic if you own a historic home or a registered landmark
Historic
Recommendation:
Choose HO-8
HO-8 policy is designed to address specific concerns with coverage for older homes.
The coverage details of a HO-8 are basically the same as a HO-3, but with special adaptations to
better suit older homes, which may have different coverage needs than newer houses. Historic
homes and registered landmarks usually carry this type of policy.
```

#### **Conclusion:**

Thus, as explained above, this application recommends the most suited Home Insurance Policy to a user depending on the inputs given by the user. The screen shots of the recommendations provided by the system, depending on the inputs are displayed in the section **Output Samples**.