**System Requirements**

**Latest Version**

31 Jan 2022

**Context**

Taylor Insurance is an insurance brokerage that provides excellent service to its customers. With well-located offices throughout the province and easily accessible insurance representatives, customer service is Taylor’s priority.

To better serve the modern customers Taylor Insurance is planning to expand its online customer servicing. Taylor Insurance is looking for interested IT consultancy companies to enter a bidding process to help move the company’s business development and quoting and renewal processes online as well as to provide a mobile app for existing customers.

**Non-Functional Requirements**

**Operational**

* There will be one main website.
* New Customers should be able to quote a policy and create a profile on the website.
* Existing Customers should be able to purchase, renew, cancel and view policies on the website after they login.
* The website must be mobile friendly.
* An Android mobile application (“app”), which will complement the web portal, will enhance the customer experience by providing policy information and aiding in customer service. (The app is for existing customer only and should require the same login as the website.)

**Performance**

* The system will run smoothly and efficiently with very little wait times for customers

**Security**

* All customer data will be securely stored on a centralized server

**Cultural**

* The system shall be built so that transition to French language will be seamless

**Functional Requirements**

* **Platform requirements:**
  + Web application must be built in Java
  + The database must be relational and SQL compliant
  + Mobile application must be built for Android devices
  + All branding, logo and color schemes will be provided as part of the process
* Core functionality:
  + Web site must allow the customer to do the following:
    - Login / register new user
    - edit profile
    - Quote a policy (new or existing customers)
    - Renew a policy (within 2 months of expiry)
    - Cancel a policy
    - Contact a service rep
  + Mobile Application must include the following:
    - Login using web site credentials
    - Review policy details (active policies only)
    - Home / auto tips (or something of comparable value)
    - Contact a service rep
* Business requirements
  + Policies have the following properties
    - Single insured person
    - Start date and an end date - all policies are only a year long
    - Base Premium, Tax (15% HST) and Total Premium
    - Either a home or an auto policy
  + Home policies have the following properties
    - A single residence with the following properties (which are risk factors)
      * Age built
      * Type of dwelling (bungalow, attached, semi-attached, etc.)
      * Heating type
      * Location (urban vs rural)
    - Replacement cost value
    - Liability limit and deductible for people harmed on property (these are not used in calculations and can just be ignored during quoting)
    - Contents insurance limit and deductible (these are not used in calculations and can just be ignored during quoting)
  + Auto policies have the following properties
    - Insured person is principal driver
      * Age, number of accidents in last 5 years (risk factors)
      * Address
    - A vehicle with make/model/year
  + A customer with an active home and auto policy gets 10% off both
    - Note: premiums are not dynamic – they are fixed for a year so if one policy expires the 10% off doesn’t leave the other policy until renewal
  + A customer can have at most one active home policy and two active auto policies.
  + Premium risk rates must be easily updated by retrieving rates from a web service.
  + Accidents have a date, at fault driver (assume there is only one).
    - Assume that only the single insured person on the policy can get in an accident

**Premium Rating (Values are susceptible to change)**

* + **Home Insurance Premium**

Base Premium: $500

Home value factor: 0.2% of home value above $250,000

Home Age Factor: >25 years old: 1.25; >50 years old: 1.5

Heating Factor: oil heat: 2.0; wood heat: 1.25; all other: 1

Location Factor: urban: 1.0; rural: 1.15

* + **Auto Insurance Premium**

Base Premium: $750

Driver Age Factor: <25 years old: 2; otherwise: 1

Accidents: >2 accidents in last 5 yrs: 2.5; 1 accident in last 5 yrs: 1.25; otherwise: 1

Vehicle: Car >10 years old: 2; Car >5 years old: 1.5; otherwise: 1