

# README:

## Travel Insurance Quote and Confirmation Workflow

### Overview

This document outlines the functionality implemented in the React frontend for handling **travel insurance quotes and confirmations** in the **Corporate Travel** application. It focuses on two core components:

- `src/components/Insurance.js`
- `src/components/AcceptInsurance.js`

These components interact with multiple backend microservices to provide a streamlined user experience—from generating a travel insurance quote to policy confirmation and notification.

### Workflow Description

The process enables users associated with a pending booking to optionally add travel insurance. It is divided into **two main stages**, handled by separate React components.

#### 1. Quote Generation – `Insurance.js`

- Displays a pre-filled form with available user and booking data (e.g., age, destination).
- Collects required user input:
  - Travel start and end dates
  - Desired coverage amount
  - (Optional) Pre-existing medical conditions

- Age (if not already pre-filled)
- On submission, it sends a POST request to the **Quote Service** at <http://bore.pub:xxxxx/quotes>.

#### On Success:

- Displays the quote including:
  - **Premium**
  - **Quote ID**
  - **Quote Expiry**
- User options:
  - **Accept Quote** → Navigates to [AcceptInsurance.js](#), passing user, booking, and quote details via [location.state](#).
  - **Decline Quote** → Navigates back to the user dashboard without purchasing insurance.
  - **Go Back** → Returns to the previous screen.

## 2. Policy Confirmation – [AcceptInsurance.js](#)

- Receives data passed from [Insurance.js](#).
- Executes a **sequential API call workflow**:

### a. Policy Service

- **Endpoint:** <http://bore.pub:xxxxx/api/policies/external>
- **Purpose:** Creates an official policy.
- **Request:** User ID, dates, coverage, premium, etc.
- **Response:** [policyId](#)

### b. Document Service

- **Endpoint:** `http://bore.pub:xxxxx/api/documents/`
- **Purpose:** Generates a downloadable policy document (PDF).
- **Request:** `policyId`
- **Response:** Document URL
- **Note:** Uses a helper function `fixDocumentUrl()` to convert internal URLs (e.g., `host.docker.internal`) to public URLs.

#### c. Email Service

- **Endpoint:** `http://bore.pub:12026/send-suds-email`
- **Purpose:** Sends policy confirmation via email.
- **Request:** User email + policy details

#### d. SMS Service

- **Endpoint:** `http://bore.pub:34664/send-suds-sms`
- **Purpose:** Sends SMS confirmation.
- **Request:** User phone number + policy details

#### User Feedback

- Real-time status updates displayed to the user:
  - "Creating policy..."
  - "Generating document..."
- Errors are handled gracefully:
  - If **policy creation** fails → the process halts with an error message.
  - If **document/email/SMS** fails → user is warned, but process completes.

- Final confirmation screen:
  - Displays status messages
  - Provides document link (if available)
  - Redirects automatically to the dashboard after a short delay.

Github Repository Link:

<https://github.com/Suds666/Corporate-Travel-Cloud-Computing-Project.git>