Schema for Extracting Car Insurance Policy Information

To facilitate generating quotes from other insurance companies, the AI tool should extract the following crucial information from car insurance policy documents. This schema is derived from common elements observed in the provided policies (e.g., policyholder details, vehicle specs, coverage terms, premiums, and discounts). It is structured as a hierarchical list of fields, with descriptions, data types, and examples based on the attached documents. Fields are prioritized for quote generation, focusing on those that insurers typically require (e.g., risk assessment, pricing factors).

The schema is divided into categories for clarity: Policyholder, Vehicle, Coverage, Premium and Discounts, Insurer and Policy Details, and Additional Endorsements. Each field includes:
- Field Name: The key to extract.
- Description: What it represents and why it's crucial for quotes.
- Data Type: Expected format (e.g., string, date, number).
- Required: Yes/No (mandatory for basic quotes).
- Example from Documents: Sample from the provided PDFs.

 1. Policyholder
- Name: Full name of the insured/policyholder. Used for identity verification and personalization in quotes.
  - Data Type: String
  - Required: Yes
  - Example: "LI CHEUK TAT"
- Address: Postal or residential address. Helps assess location-based risks (e.g., urban vs. rural).
  - Data Type: String
  - Required: Yes
  - Example: "C/O BERLIN UNDERWRITERS LTD, NORTH POINT, HONG KONG"
- Occupation/Business: Profession or business type. Influences risk profiling (e.g., higher risk for certain jobs).
  - Data Type: String
  - Required: Yes
  - Example: "RETAIL (NON-MOTOR)" or "ACCOUNTANT"
- Named Drivers: List of specified drivers (if any). Affects premium calculations based on driver profiles.
  - Data Type: Array of Strings
  - Required: No
  - Example: ["LI CHEUK TAT"]
 2. Vehicle
- Registration Mark: Vehicle license plate number. Unique identifier for the car.
  - Data Type: String
  - Required: Yes
  - Example: "WW8687" or (inferred) "VL9902"
- Make and Model: Manufacturer and specific model. Key for valuing the vehicle and assessing repair costs.
  - Data Type: String
  - Required: Yes
  - Example: "TESLA MODEL 3" or "MORNING EX PLUS SPORT"
- Year of Manufacture: Age of the vehicle. Older cars may have higher premiums due to risk.
  - Data Type: Integer (year)
  - Required: Yes
  - Example: 2020 or 2018

- Chassis Number/VIN: Vehicle Identification Number. Used for verification and anti-fraud.
  - Data Type: String
  - Required: Yes
  - Example: "5YJ3F7EB9LF747794"
- Engine Number: Engine serial number (if applicable). Sometimes required for older vehicles.
  - Data Type: String
  - Required: No
  - Example: "N/A"
- Cubic Capacity/CC: Engine size in cubic centimeters. Impacts performance-based pricing.
  - Data Type: Number
  - Required: Yes (for non-electric vehicles)
  - Example: 0 (electric) or 1248.00
- Seating Capacity: Number of seats including driver. Indicates vehicle type (e.g., family car).
  - Data Type: Integer
  - Required: Yes
  - Example: 5
- Body Type: Vehicle style (e.g., saloon, SUV). Affects risk and premium.
  - Data Type: String
  - Required: Yes
  - Example: "SALOON"
- Estimated Value: Insured's declared value of the vehicle including accessories. Basis for coverage limits.
  - Data Type: Number (in HKD)
  - Required: No (but useful for comprehensive quotes)
  - Example: "N/A" or "HKD0.00"
 3. Coverage
- Type of Cover: Level of insurance (e.g., third party only, comprehensive). Determines quote comparison.
  - Data Type: String
  - Required: Yes
  - Example: "THIRD PARTY ONLY"
- Liability Limits: Maximum payout for third-party claims (e.g., bodily injury, property damage).
  - Data Type: Object (e.g., {bodilyInjury: number, propertyDamage: number})
  - Required: Yes
  - Example: {bodilyInjury: 100000000, propertyDamage: 2000000}
- Excess/Deductible: Amounts policyholder pays out-of-pocket (e.g., for young/inexperienced drivers).
  - Data Type: Object (e.g., {thirdPartyProperty: number, youngDriver: number})
  - Required: Yes
  - Example: {thirdPartyProperty: 10000, youngDriver: 20000, inexperiencedDriver: 20000, unnamedDriver: 30000}
- Limitations on Use: Restrictions (e.g., social/domestic only, no racing). Influences allowable usage in new quotes.
  - Data Type: String
  - Required: Yes
  - Example: "USE ONLY FOR SOCIAL, DOMESTIC AND PLEASURE PURPOSES AND FOR THE POLICYHOLDER'S BUSINESS OR PROFESSION."
- Authorized Drivers: Classes of persons allowed to drive. Affects driver coverage in quotes.
  - Data Type: String
  - Required: Yes
  - Example: "THE POLICYHOLDER. ANY OTHER PERSON WHO IS DRIVING ON THE POLICYHOLDER'S ORDER OR WITH HIS PERMISSION."

4. Premium and Discounts
- Premium Amount: Base premium paid (before levies).
  - Data Type: Number (in HKD)
  - Required: Yes
  - Example: 3584.60 or 1750.00
- Total Payable: Final amount including levies/taxes.
  - Data Type: Number (in HKD)
  - Required: Yes
  - Example: 3692.14 or 1751.75
- No Claim Discount (NCD): Percentage discount for claim-free history. Key for competitive quoting.
  - Data Type: Number (percentage)
  - Required: Yes
  - Example: 60% or 50%
- Levies/Fees: Additional charges (e.g., MIB levy, IA levy).
  - Data Type: Object (e.g., {mib: number, ia: number})
  - Required: No
  - Example: {mib: 107.54, ia: "INCLUDED"}
5. Insurer and Policy Details
- Insurer Name: Company providing the policy. Useful for excluding the same insurer in quotes.
  - Data Type: String
  - Required: Yes
  - Example: "Zurich Insurance Company Ltd" or "China Taiping Insurance (HK) Company Limited"
- Policy Number: Unique policy identifier.
  - Data Type: String
  - Required: Yes
  - Example: "ZPP4122781ZC"
- Period of Insurance: Start and end dates. Indicates when new coverage is needed.
  - Data Type: Object (e.g., {start: date, end: date})
  - Required: Yes
  - Example: {start: "01/11/2025", end: "31/10/2026"} or {start: "23/05/2022", end: "22/05/2023"}
- Date of Issue: When the policy was issued.
  - Data Type: Date
  - Required: No
  - Example: "20/10/2025" or "19/04/2022"
6. Additional Endorsements
- Endorsements/Clauses: List of special terms, extensions, or exclusions (e.g., tool of trade use).
  - Data Type: Array of Strings
  - Required: No
  - Example: ["MA03(HKD4,500.00)", "MA14H(HKD5,000.00)", "MA41", "UNNAMED DRIVER EXCESS FOR TPED"]
- Hire Purchase/Mortgagee: Any financial interest parties (e.g., lenders).
  - Data Type: String
  - Required: No
  - Example: "N/A"

This schema can be implemented in an AI extraction tool (e.g., using OCR + NLP) to parse PDFs, crop relevant sections, and output structured data (e.g., JSON). For quote generation, feed this into insurer APIs or comparison tools, ensuring fields like NCD and coverage type are matched for accurate pricing. If documents have redacted/blacked-out info (as in the examples), the tool should flag missing data.

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  "description": "Schema for extracting crucial information from car insurance policy documents to facilitate generating quotes from other insurers.",
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          "description": "Vehicle style (e.g., saloon, SUV)."
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        "estimatedValue": {
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          "description": "Insured's declared value in HKD."
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            "bodilyInjury": {
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          "description": "Maximum payout for third-party claims."
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        "unnamedDriver": {
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      "description": "Deductible amounts."
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    "authorizedDrivers": {
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      "description": "Classes of persons allowed to drive."
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        "end": {
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      "description": "Start and end dates."
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      "format": "date",
      "description": "When the policy was issued."
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    "hirePurchaseMortgagee": {
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    }
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},
"required": ["policyholder", "vehicle", "coverage", "premiumAndDiscounts", "insurerAndPolicyDetails"]
}
```