

Insurance Details API



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Insurance API

- API for searching the health insurance details
- User can compare the property in each insurance company
- Both of them contain company name, type of insurance, premium rate, policy period, covered medical expenses, and etc.

Insurance company	Program name	Category	Premium rate(Baht/year)	Policy period(year)	Covered medical expenses(Baht)
Cigna	Protect office syndrome	office syndrome	2172	60	300000
Cigna	Protect Critical disease	Critical disease	3372	61	3000000
Thai Life Insurance	Elite Health	Critical disease	34833	84	40,000,000
Thai Life Insurance	Elite Health	Non-fatal disease	34833	84	40,000,000
Bangkok	BLA Health Plus	Non-fatal disease	43127	79	2500000
Bangkok	BLA Health Plus	Critical disease	43127	79	3000000
Bangkok	BLA Health Plus	Critical accident	43127	79	5000000
Thai Life Insurance	CI Perfect Care	Critical disease	49920	85	7800000
AIA	Lady care	Lady disease	4840	30	1000000
Thai Life Insurance	Lady plus	Lady disease	10140	40	2600000
Philip	HS20000	Critical accident	33260	84	2,797,000
Philip	HS20001	Critical disease	33260	84	2,797,000
Philip	HS20002	Non-fatal disease	33260	84	2,797,000
AIA	AIA H&S Plus Gold 4M	Critical accident	44080	79	4,000,000
AIA	AIA H&S Plus Gold 4M	Critical disease	44080	79	2,000,000
AIA	AIA H&S Plus Gold 4M	Non-fatal disease	44080	79	2,000,000
Aetna	Extra vsue	Critical disease	1485	55	900000
FWD	Exclusive care	ALL	30000	70	3300000
Kasikorn	Whole protect	Critical accident	12,000	70	500000
Kasikorn	Whole protect	Critical disease	22,800	70	500000
Kasikorn	Whole protect	Non-fatal disease	11,600	70	500000
Muang Thai Insurance	Health Smile	ALL	45000	65	800000
Tip	Tip insurance	Non-fatal disease	15000	60	500000
SCB	Happy health	ALL	20000	65	650000

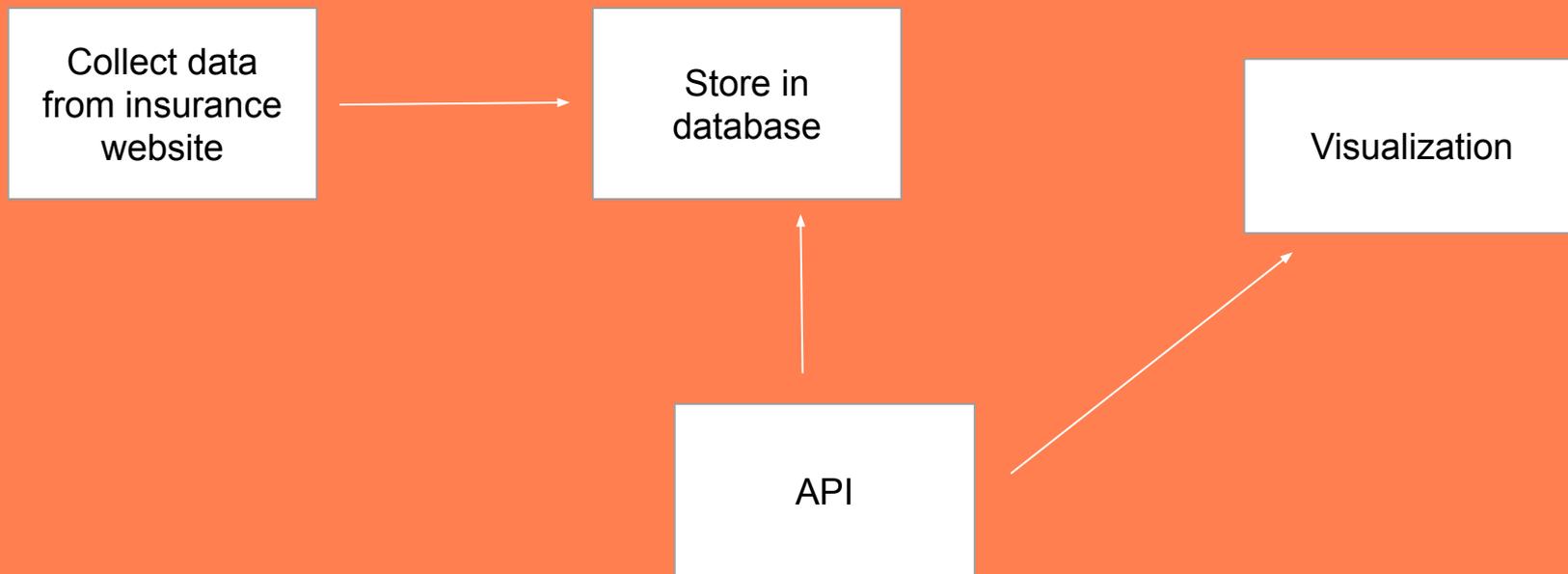
Motivation

- We want compare premium rate of the insurance with the same disease coverage in any insurance company.
- Easy to find insurance that match user needed.
- Easy to find the worstest insurance.

Objective

- What health insurance company have the least premium rate
- Which program of health insurance cover the user's disease
- Which program of health insurance have the most covered medical expenses
- Show program of each insurance company.
- Show minimum and maximum premium rate

Architecture



Data Source

- Insurance website

Collection mechanisms

- Watch data from website, collect and store in database.

Data sharing API

<https://github.com/jampttws/InsuranceAPI>

Data Integration

For data integration, We use **MySQL** database to store insurance details separately in columns.



The screenshot shows the phpMyAdmin interface for a MySQL database. The left sidebar displays the database structure, including a table named 'car_insurance'. The main window shows the 'Structure' tab for the 'car_insurance' table, displaying a list of 18 rows with columns: id, company_name, insurance_type, car_type, premium_rate, sum_insured, and third_paid_property. The interface includes navigation buttons like 'Browse', 'Structure', 'SQL', 'Search', 'Insert', 'Export', 'Import', 'Operations', and 'Triggers'. A warning message states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below the table, there are options to show all rows, filter rows, and a 'Profiling' button.

id	company_name	insurance_type	car_type	premium_rate	sum_insured	third_paid_property
1	Dhipaya Insurance	Type1	sedan	11200	450000	2500000
2	Thai Paiboon Insurance	Type1	sedan	13900	430000	1000000
3	Axa Insurance	Type1	suv	15500	1150000	2000000
4	Roojai Insurance	Type1	suv	16365	1110000	5000000
5	Thai Life Insurance	Type1	hatchback	16600	630000	1000000
6	Muang Thai Life Insurance	Type1	hatchback	18000	630000	1000000
7	Asia Insurance	Type2+	suv	5700	100000	500000
8	Roojai Insurance	Type2+	suv	7939	5000000	2500000
9	Sinnunkong Insurance	Type2+	hatchback	6100	100000	500000
10	Thai Paiboon Insurance	Type2+	sedan	5000	100000	500000
11	Tewed Insurance	Type2	suv	4600	0	1000000
12	Roojai Insurance	Type2	sedan	4867	200000	2500000
13	Tewed Insurance	Type2	sedan	4800	0	1000000
14	Roojai Insurance	Type3+	sedan	7519	200000	2500000
15	Asia Insurance	Type3+	hatchback	5700	100000	500000
16	Roojai Insurance	Type3+	pickup	4690	200000	2500000
17	Muang Thai Life Insurance	Type3	sedan	2200	0	600000
18	Tewed Insurance	Type3	hatchback	4079	0	2500000

Data Visualization

- Express.js : create the api path and get data from database.
- React.js : for present the data with table view and implement Chart.js

Express

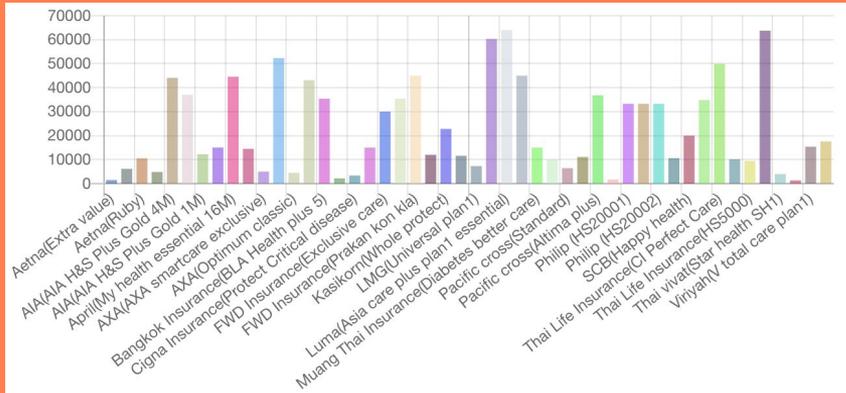


Chart.js

- Database schema
- Graph
- Table

health_insurance
id
company_name
program_name
category
premium_rate
policy_period
covered_expense

disease
category
symptom



Id	Company Name	Program	Policy Period	Premium Rate	Covered Expense
1	Thai vivat	Star health SH2	70	1340	400000
2	Aetna	Extra value	55	1485	900000
3	Pacific cross	Standard plus	60	1681	450000
4	Cigna Insurance	Protect office syndrome	60	2172	300000
5	Cigna Insurance	Protect Critical disease	61	3372	3000000
6	Thai vivat	Star health SH1	60	4000	150000
7	AXA	Optimum classic	80	4468	25000000
8	AIA	Lady care	30	4840	1000000

Demonstration

<http://localhost:3000/>