

The Project

Flexible Transaction Fee System

The Flexible Transaction Fee System is pivotal to Fasset's application infrastructure, facilitating dynamic fee configurations to optimize user interactions.



Problems Statement

- Initial state - Hardcoded billing system
- Need to be automated for fast development and delivery



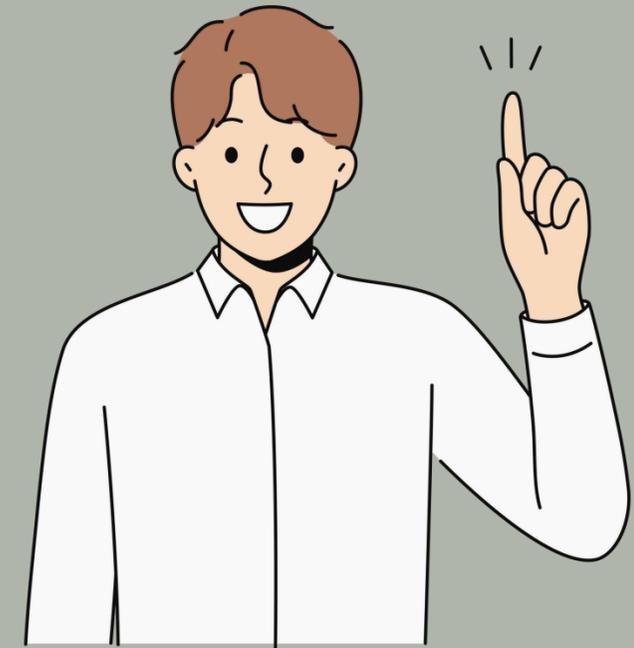
```

c > services > external > TS billing.ts > [x] RegionalChargesDetails > Buy > UserFeeShare
19 >;
20
21 export const RegionalChargesDetails: RegionalOperationChargesMap = new Map([
22   [
23     'ID',
24     {
25       Buy: { UserFeeShare: 100, margin: 1.5, tax: 0, discount: 0, dinariConstantFee: 1, dinariPercentageFee: 0, fassetFeeShare: 2 },
26       Sell: { UserFeeShare: 100, margin: 1.5, tax: 0, discount: 0, dinariConstantFee: 1, dinariPercentageFee: 0.5, fassetFeeShare: 2 }
27     }
28   ],
29   [
30     'AE',
31     {
32       Buy: { UserFeeShare: 100, margin: 1.5, tax: 0, discount: 0, dinariConstantFee: 1, dinariPercentageFee: 0, fassetFeeShare: 2 },
33       Sell: { UserFeeShare: 100, margin: 1.5, tax: 0, discount: 0, dinariConstantFee: 1, dinariPercentageFee: 0.5, fassetFeeShare: 2 },
34     }
35   ]
36 ]);
37
38 export const GlobalChargesDetails: Record<
  
```

Solution

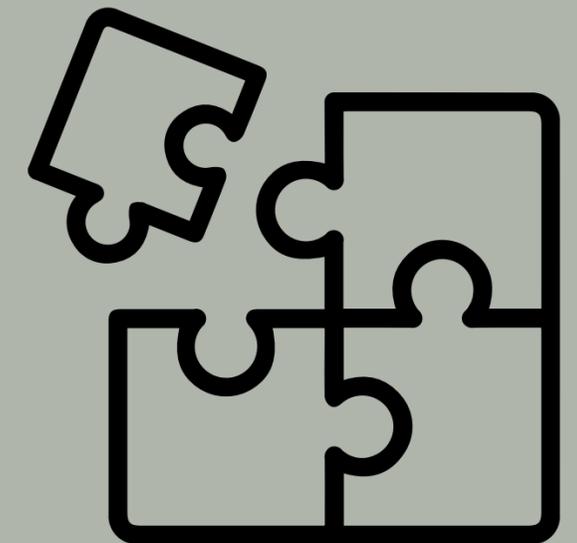
Table Creation

- Creating all the tables:
 - Country
 - Jurisdiction
 - Promotions
 - Discount Coupons
 - Billing



API Development

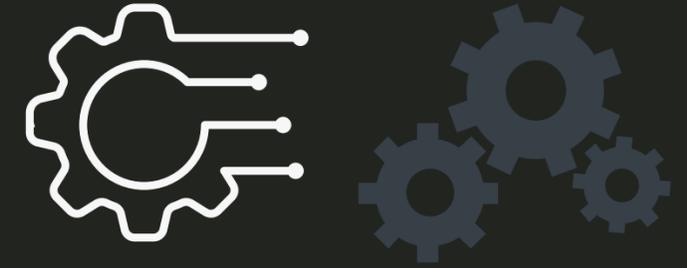
- Making required APIs to:
 - Fetch data
 - Modify data
 - Generate appropriate billings



Billing Structures

- Using required conditions and billing structures of Fasset

Output



```
POST http://localhost:3000/billing/fetchapi

Body
  none
  form-data
  x-www-form-urlencoded
  raw
  blob

1 {
2   "user_id": 1,
3   "user_status": "active",
4   "country_id": 3,
5   "jurisdiction_id": 2,
6   "promotion_id": 1,
7   "discount_id": 3,
8   "billing_fee": 100.0,
9   "event_type": "buy"
10 }
11
12
```

```
Raw Preview Visualize JSON
1 "billing_id": 7,
2 "user_id": 1,
3 "user_status": "active",
4 "jurisdiction_id": 2,
5 "country_id": 3,
6 "promotion_id": 1,
7 "discount_id": 3,
8 "billing_fee": 100,
9 "event_type": "buy",
10 "applied_discount": 20,
11 "applied_margin": 2,
12 "jurisdiction": {
13   "id": 2,
14   "jurisdiction_name": "LB",
15   "UserFeeShare": 10.5,
16   "tax": 5,
17   "jurisdiction_discount": {
18     "name": "Summer Discount",
19     "percentage": 20
20   },
21 },
22 "buy_margin": 2,
23 "sell_margin": 3,
24 "FassetFee": 1,
25 "dinariConstantFee": 0.5,
26 "dinariPercentageFee": 0.25,
27 "createdAt": "2024-07-28T16:50:58.705Z",
28 "updatedAt": "2024-07-28T16:50:58.705Z"
```



Key Takeaways

