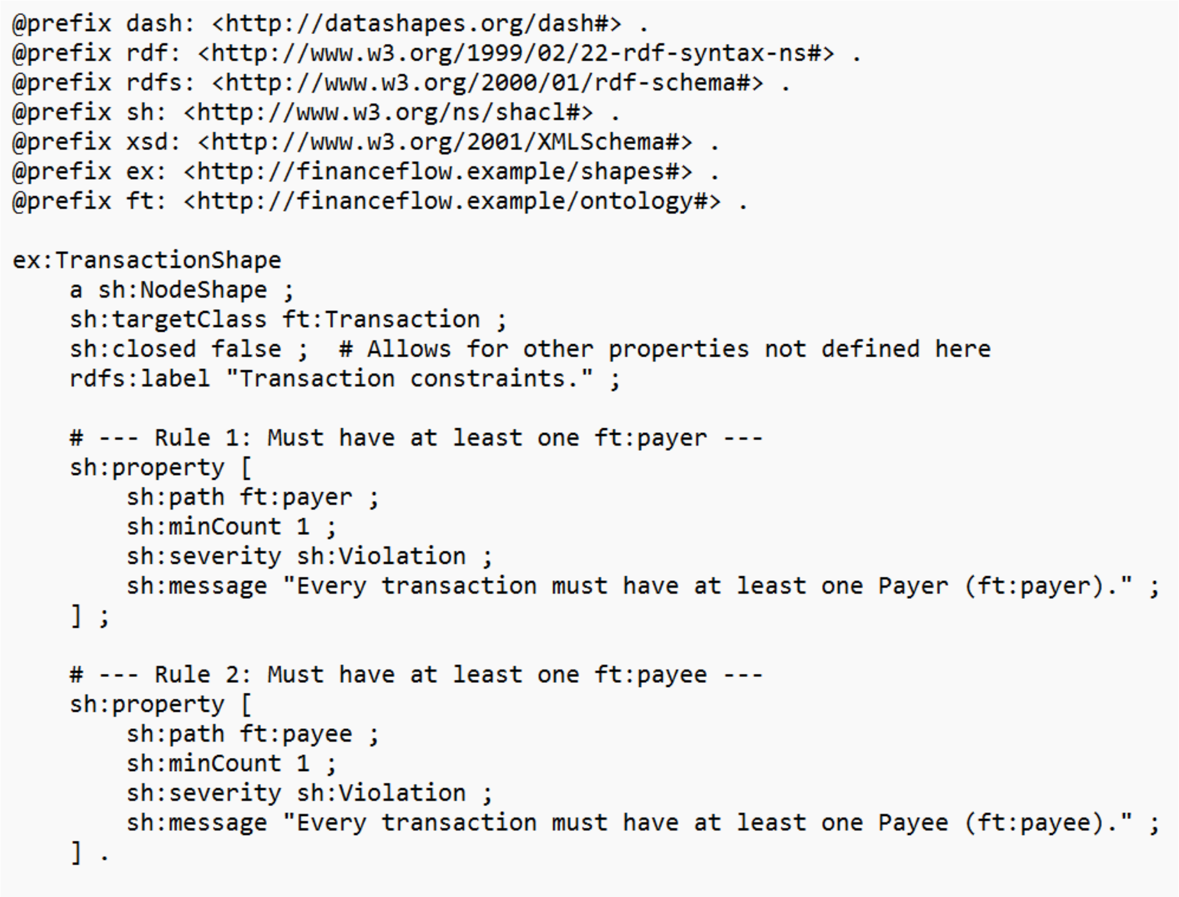
SHACL

Here is the SHACL file that would be filled by a user.

This enables the **user** to dictate their preferences to the program, not the other way around. This gives the user ultimate and precise control over the internal structure of their transactions.

This example has a rule that a transaction must have at least one payer and one payee, but **any** SHACL constraint could be applied to the transaction data.



```
@prefix dash: <http://datashapes.org/dash#> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix sh: <http://www.w3.org/ns/shacl#> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix ex: <http://financeflow.example/shapes#> .
@prefix ft: <http://financeflow.example/ontology#> .

ex:TransactionShape
    a sh:NodeShape ;
    sh:targetClass ft:Transaction ;
    sh:closed false ;  # Allows for other properties not defined here
    rdfs:label "Transaction constraints." ;

    # --- Rule 1: Must have at least one ft:payer ---
    sh:property [
        sh:path ft:payer ;
        sh:minCount 1 ;
        sh:severity sh:Violation ;
        sh:message "Every transaction must have at least one Payer (ft:payer)." ;
    ] ;

    # --- Rule 2: Must have at least one ft:payee ---
    sh:property [
        sh:path ft:payee ;
        sh:minCount 1 ;
        sh:severity sh:Violation ;
        sh:message "Every transaction must have at least one Payee (ft:payee)." ;
    ] .
```