

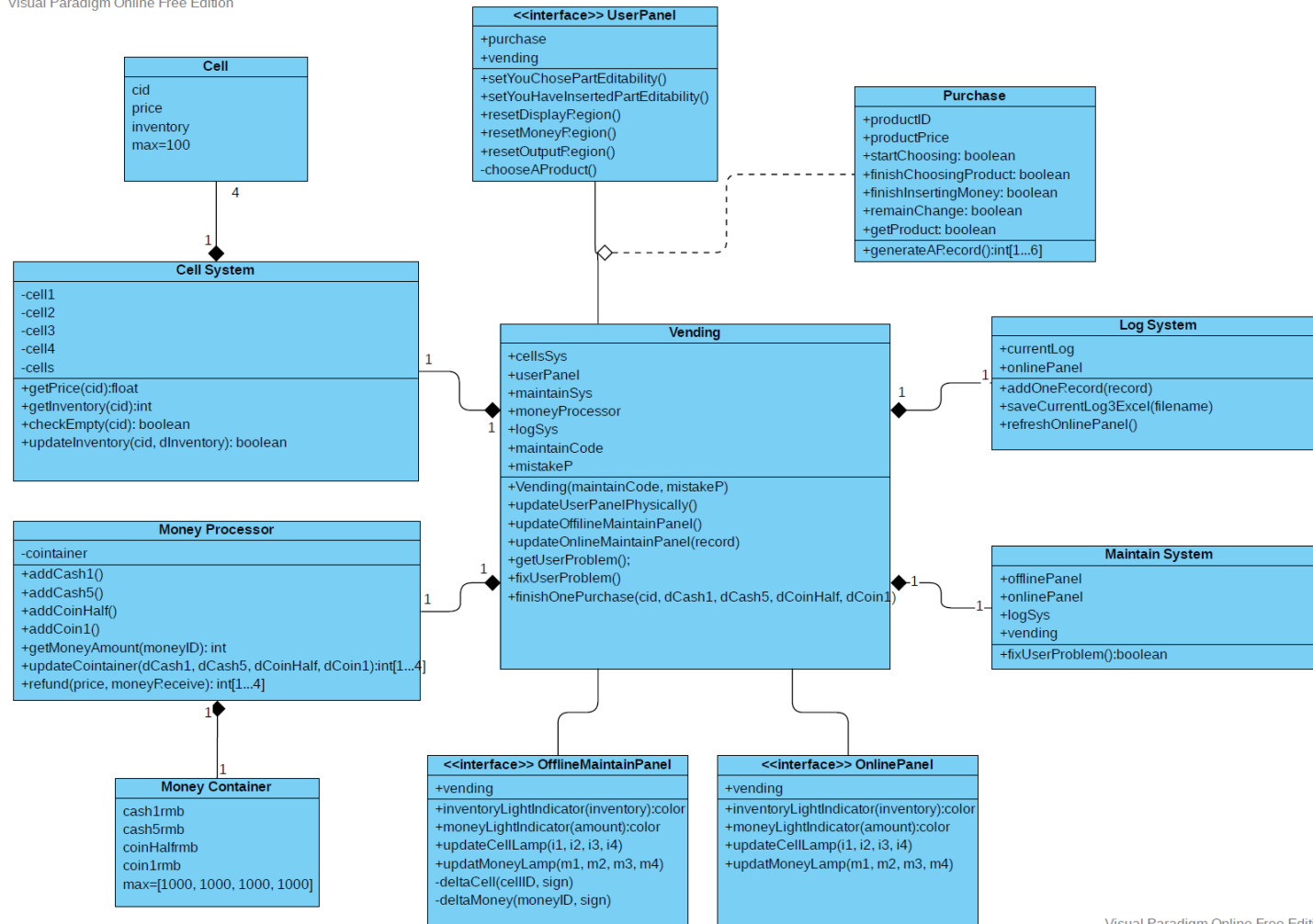
# Vending Machine

Group 1

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# System Structure

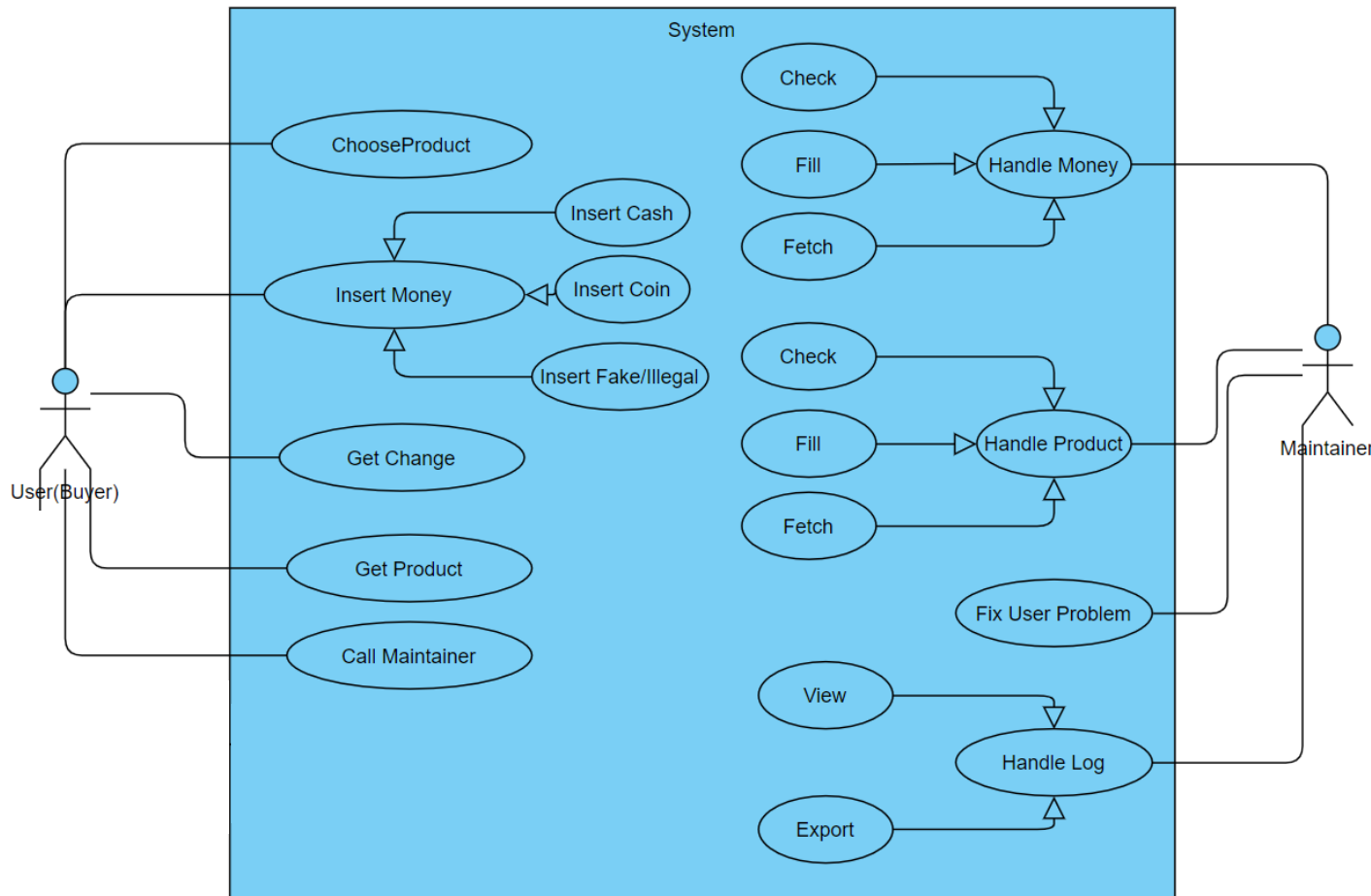
Visual Paradigm Online Free Edition



Visual Paradigm Online Free Edition

- 1 Controller
  - Vending
- 1 Association Class
  - Purchase
- 2 Physical Containers
  - Cell
  - Money Container
- 3 Panels
  - User Panel
  - Offline Maintain Panel
  - Online Maintain Panel
  - (Fake Panel)
  - (Color Indicator Panel)
- 4 Systems
  - Cell System
  - Money Processor
  - Maintain System
  - Log System

# Use Case & Exception



- Exception:
  - Product
    - Empty Cell
    - Full Cell (max=100)
    - Stuck
  - Money
    - Empty container
    - Full container (max=1000)
    - Insufficient to refund

# Test & Validation

- Unit Test - branch coverage
    - Class: Functional functions of Controller & Systems
    - UI Test: Lamp Indicators on Panels
  - Integration Test
    - Consistency of Panels and Association Class (Purchase)
    - Consistency of Panels and Physical Containers
  - Functional Test
    - Cover all use cases in Use Case Diagram
  - Uppal for Model Checking – TBA
    - Full behaviour, Exception Handling
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