

Task 2

Functional Requirements

On Startup

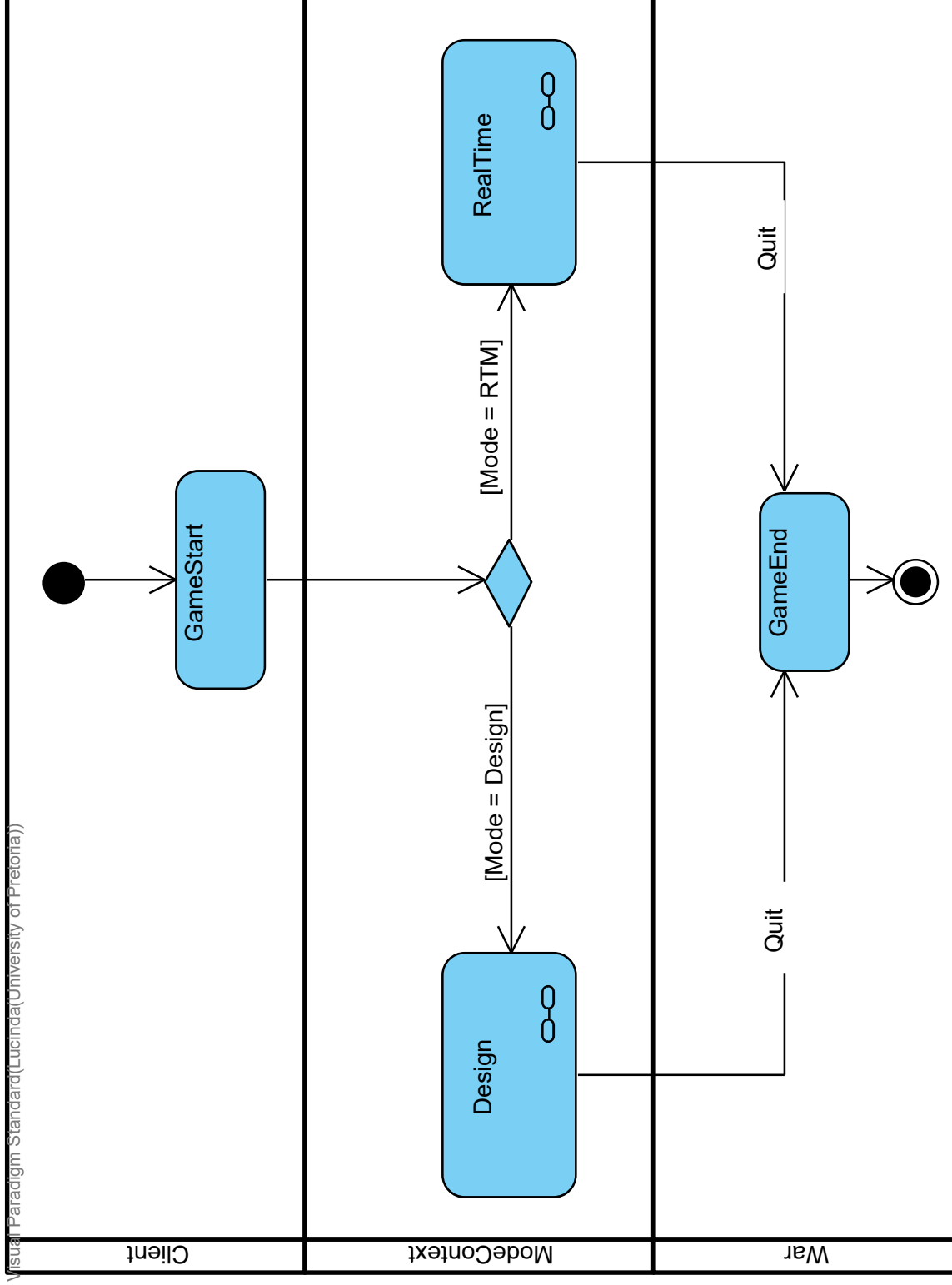
- User can choose between design mode and real time mode
- A user can choose a country from a provided list
- A user can name the war
- A user can save the state of the war
- A user can resume a war and consequently start a battle.
- A user can initiate a battle

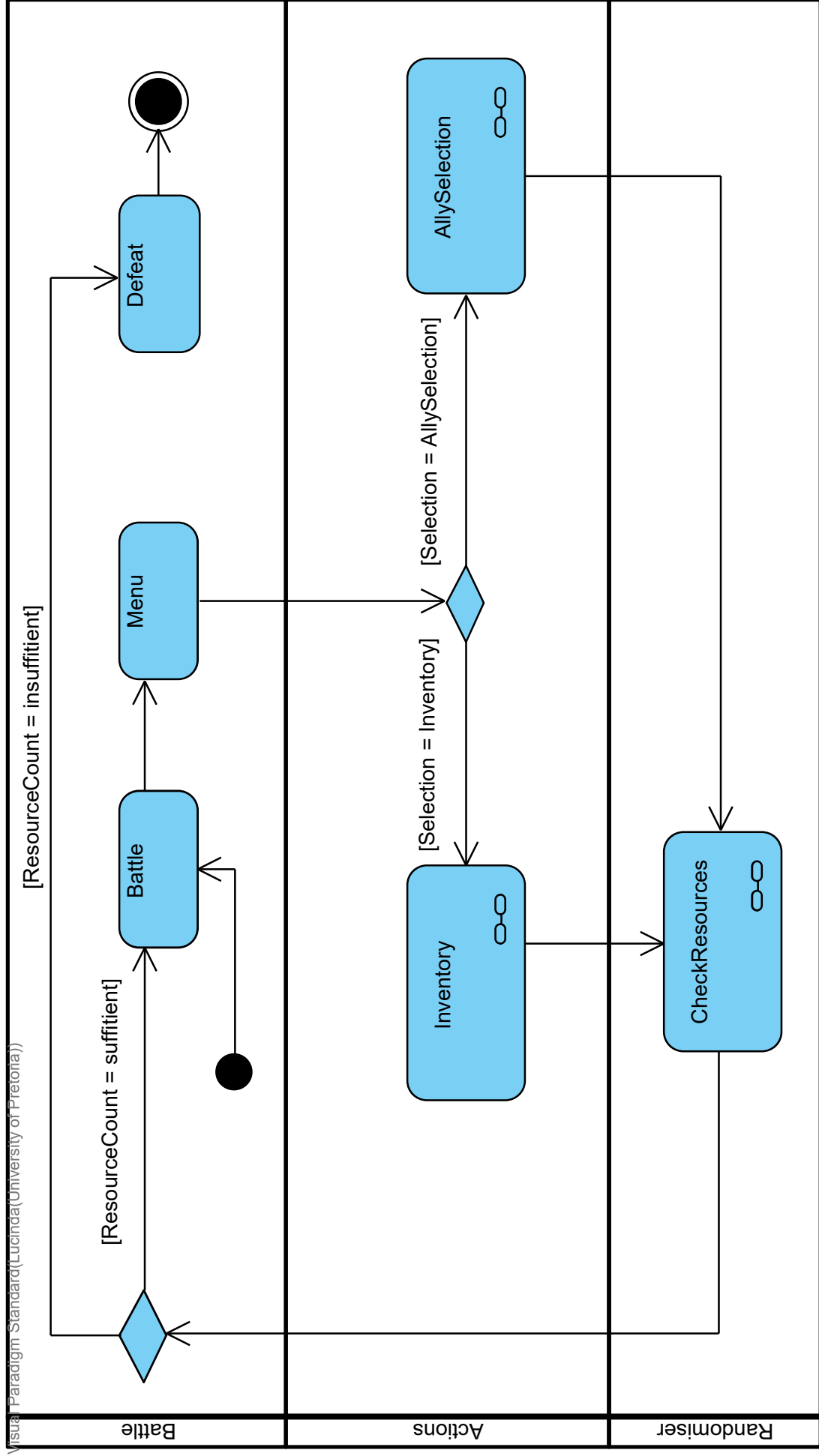
Design Mode

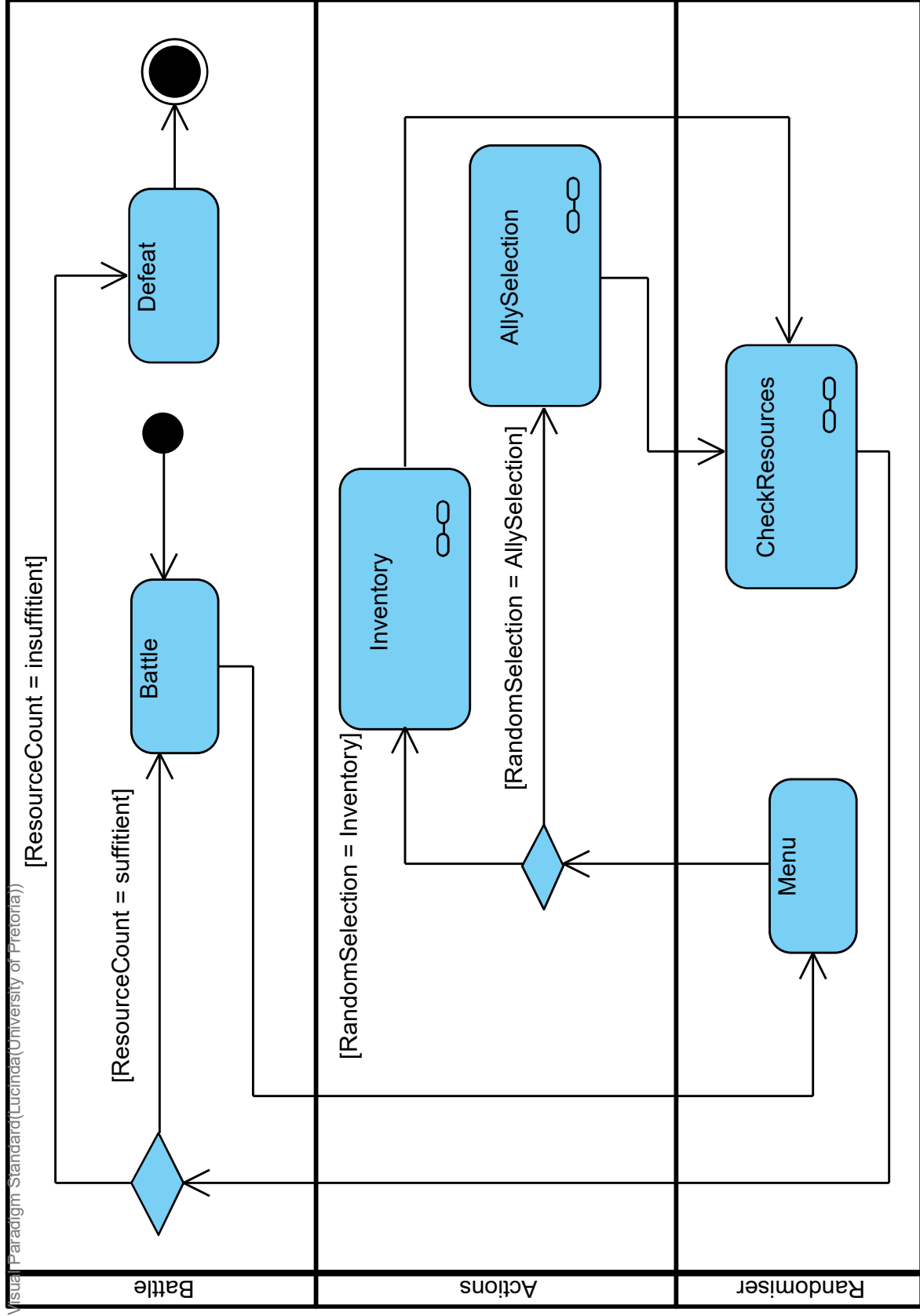
- A user can name the battle
- A battle is a round
- Each round a user can purchase from the inventory shop
- The shop consists of weapons, armour, supplies, soldiers, medics, vehicles.
- Based on what the user has at their disposal, the war theatre will be set.
- The user can also save the state of the battle.
- A user can undo the battle
- A user can surrender
- A user can apply to form alliances with other countries from the original pool.
- Ally countries have a friendly metre which will determine if they will accept the alliance.
- A user should be able to see their statistics at all times.
- A user's statistics depend on how many of each thing they have in their inventory.
- A user's action should change the phase of the war.
- Transport needs to be available before medics can be purchased.
- An ally needs to be able to pull out of an alliance
- Vehicles need to have different purposes

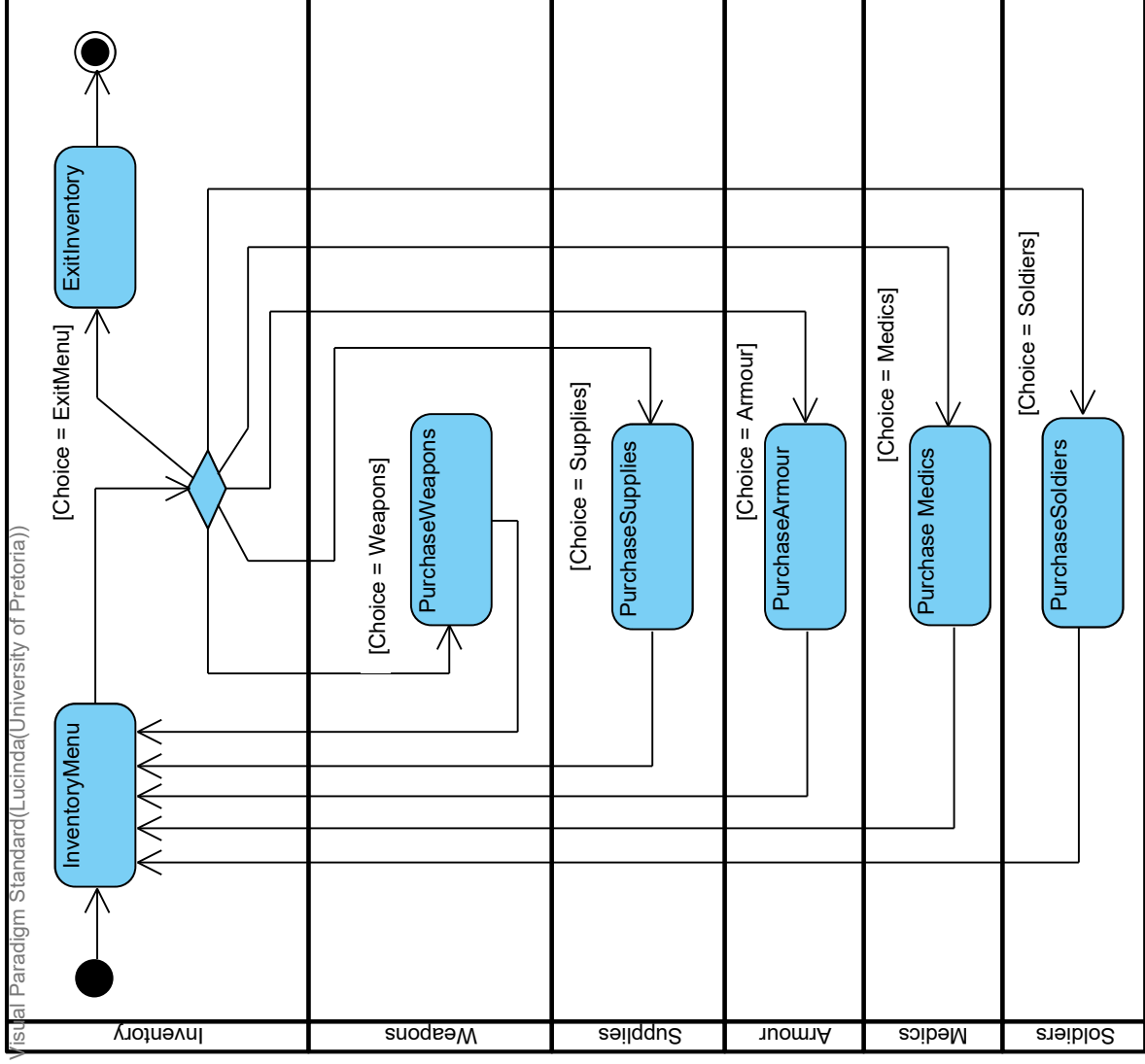
Real Time Mode

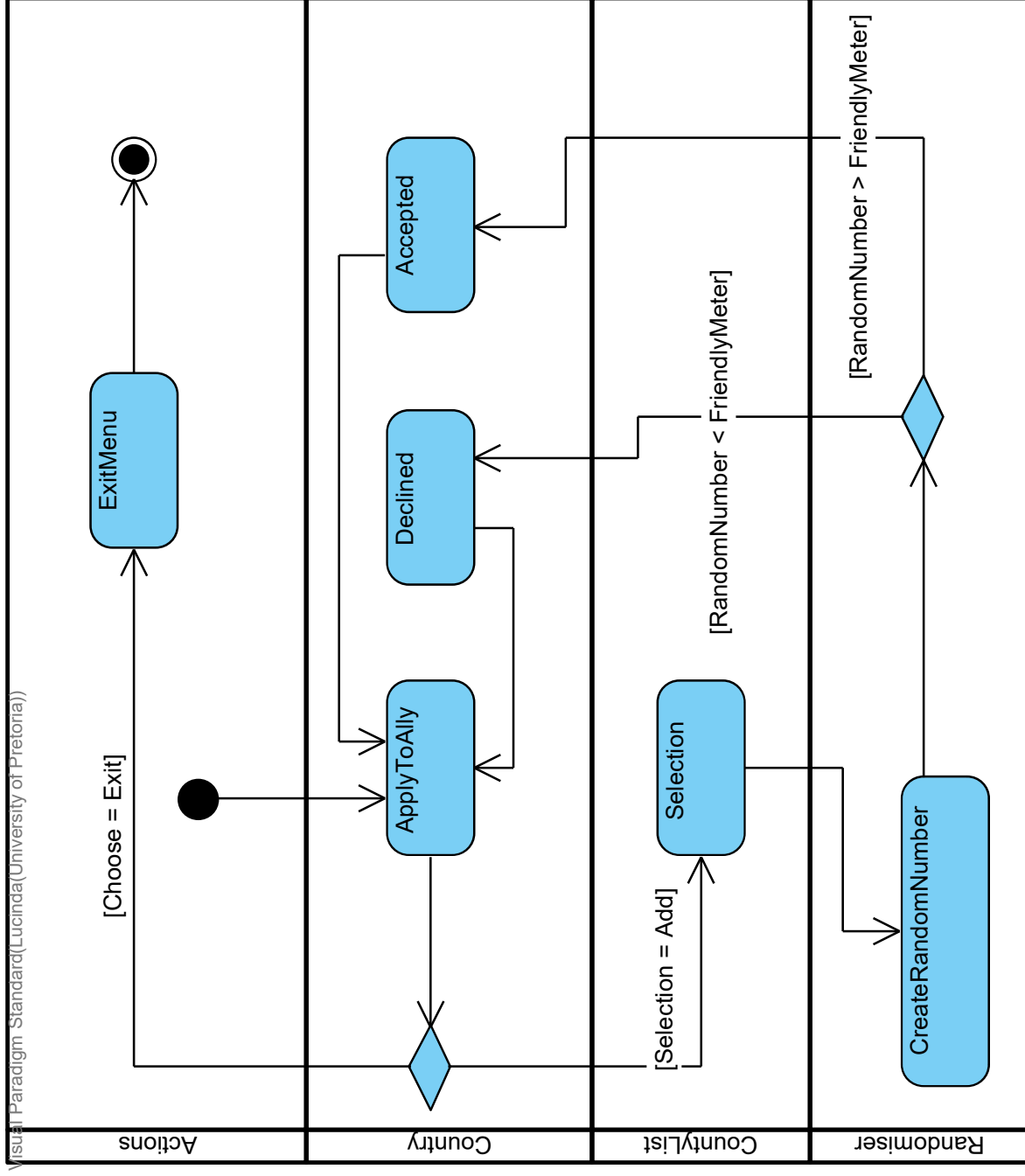
- Real time mode is an exact copy of the design mode, just all input is randomised.

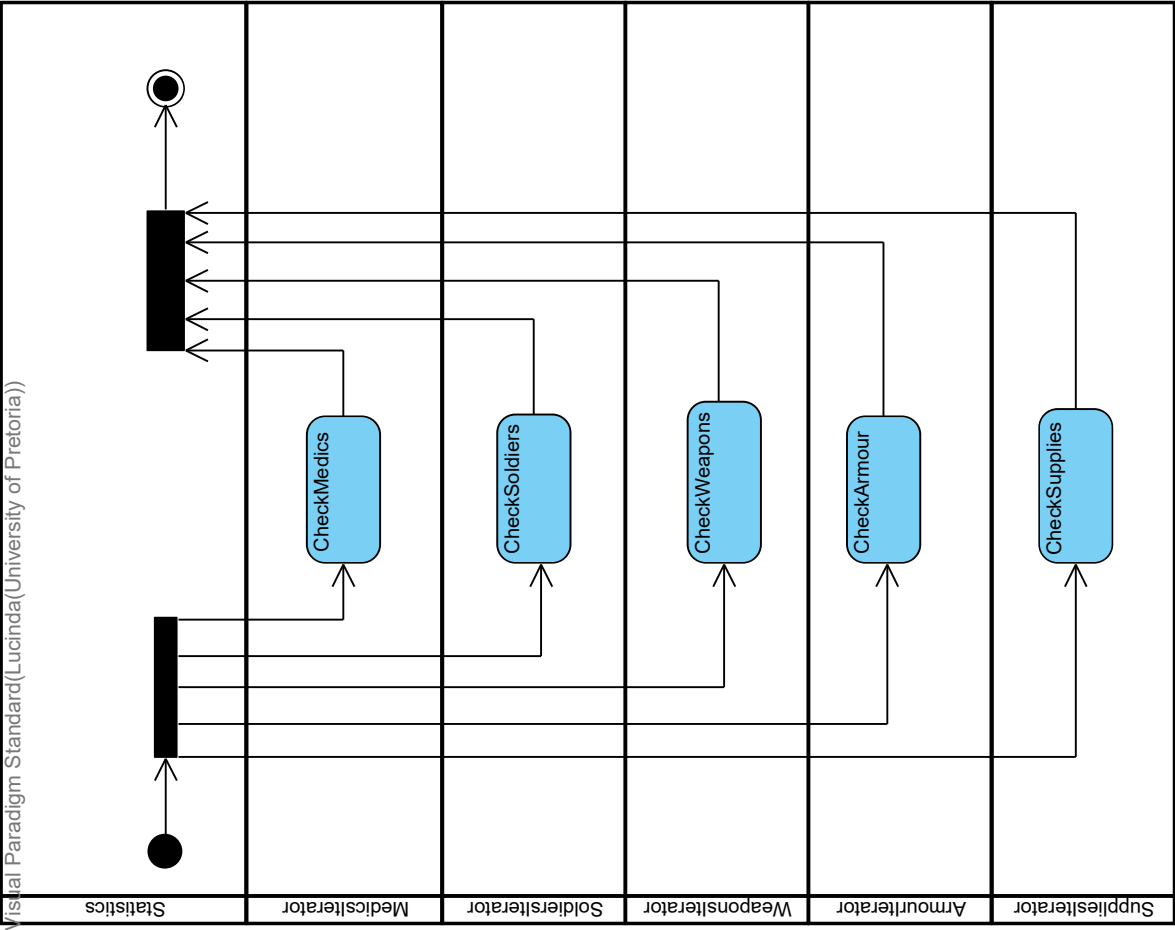












Design Patterns

1. Memento
2. Abstract Factory
3. State
4. Strategy
5. Decorator
6. Iterator
7. Observer
8. Command
9. Prototype
10. Template
11. Facade

Class Diagram
Visual Paradigm Standard(Lucinda(University of Pretoria))

