

Ethan Booker

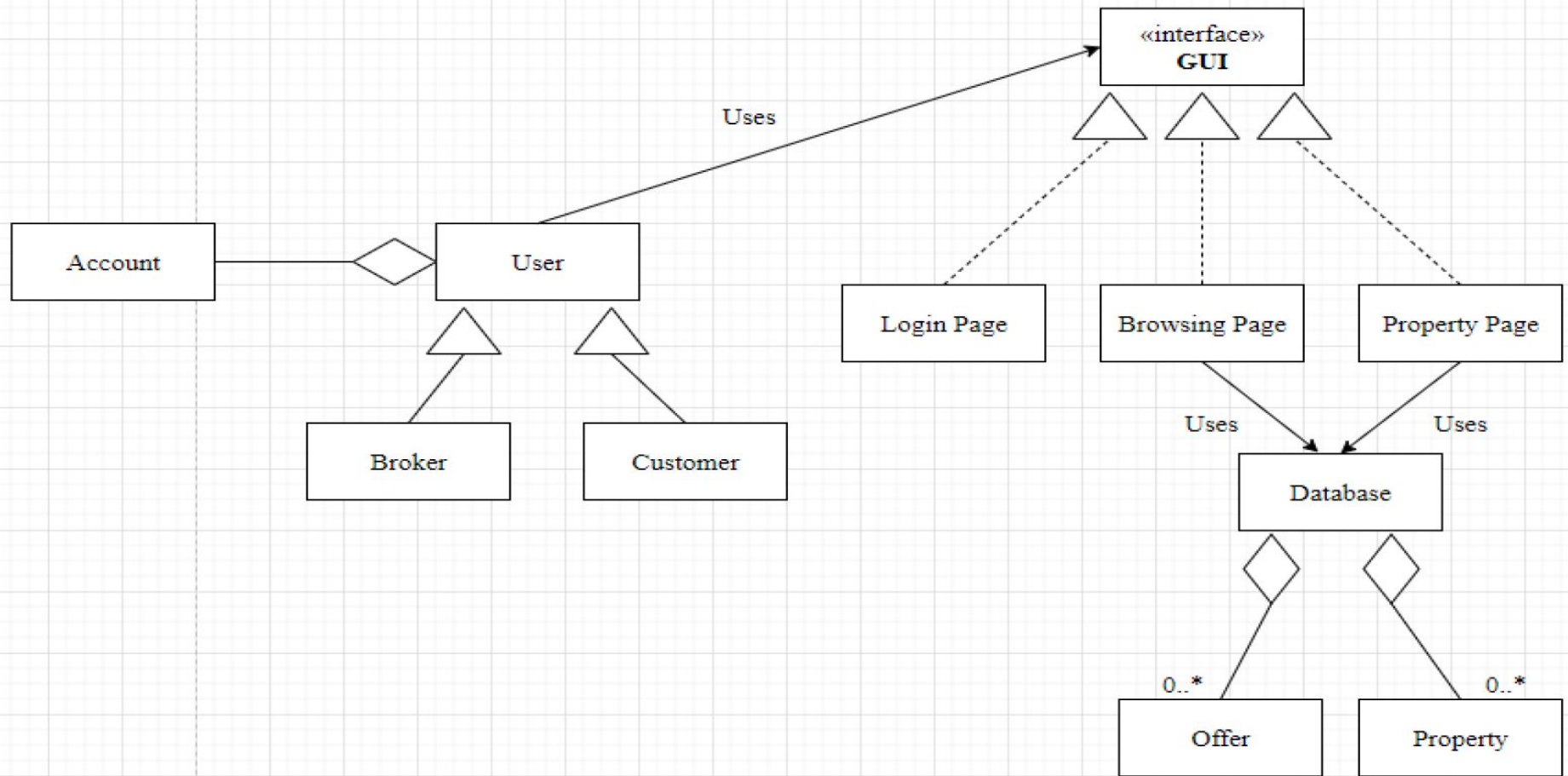
CS 746 Assignment 4

Notes

I have read your comments about my previous UML diagram and I tried to make changes accordingly.

I do appreciate your feedback as I can learn from my mistakes. (Hopefully)

UML Class Diagram



Documentation for Class Diagram

Class User

online: Boolean

account: Account

Class Broker

(** this class inherits properties from User class **)

Class Customer

(** this class inherits properties from User class **)

Class Account

username: String

active: Boolean

(** This class will include one method "Deactivate" **)

Documentation for Class Diagram

Interface GUI

(** this interface is a GUI interface and will be designed later **)

Class Login Page

(** This class will include one method “Login” **)

Class Browsing Page

(** This class will include four methods “Retrieve”, “Filter”, “RedirectToBrowsing”, “Logout” **)

Class Property Page

(** This class will include three methods “Retrieve”, “RedirectToProperty”, “Logout” **)

Documentation for Class Diagram

Class Database

password: Set of string

property: Set of Property

offer: Set of Offer

(** This class will include five methods “Set”, “Fetch”, “Delete”, “Add”, “Create” **)

Class Offer

property: Property

broker: Broker

customer: Customer

price: Double

status: String

(** This class will include three methods, “Accept”, “Deny”, “Complete”, “Store”, **)

Documentation for Class Diagram

Class Property

type: String

address: String

location: String

area: Double

available: Boolean

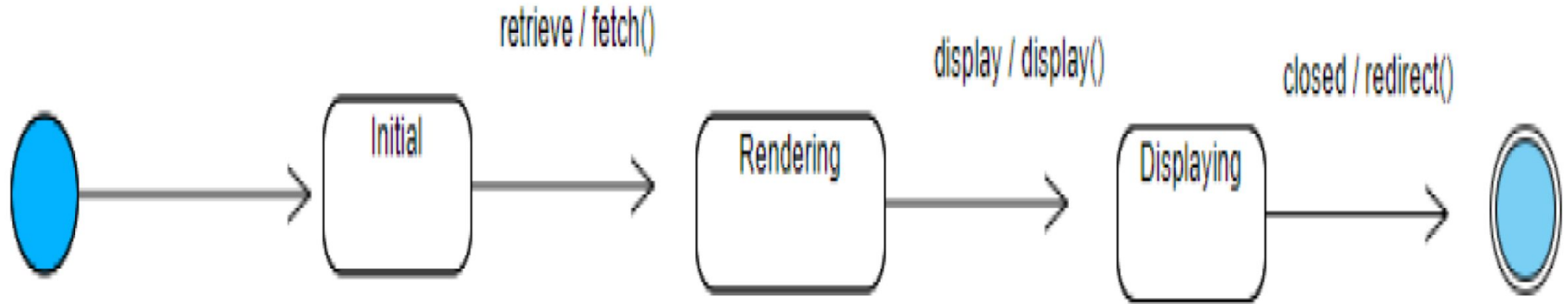
additionalInfo: List<Object>

(** This class will include four methods “Add”, “Delete”, “Sell”, “Buy” **)

Note: additionalInfo is unclear and will also serve the purpose of holding information about the rooms and etc.

State Diagram for Login Page, Browsing Page, Property Page

Note: Because interfaces can't have state, GUI interface won't have a state diagram.



Documentation for the Login Page, Browsing Page, Property Page object state diagrams

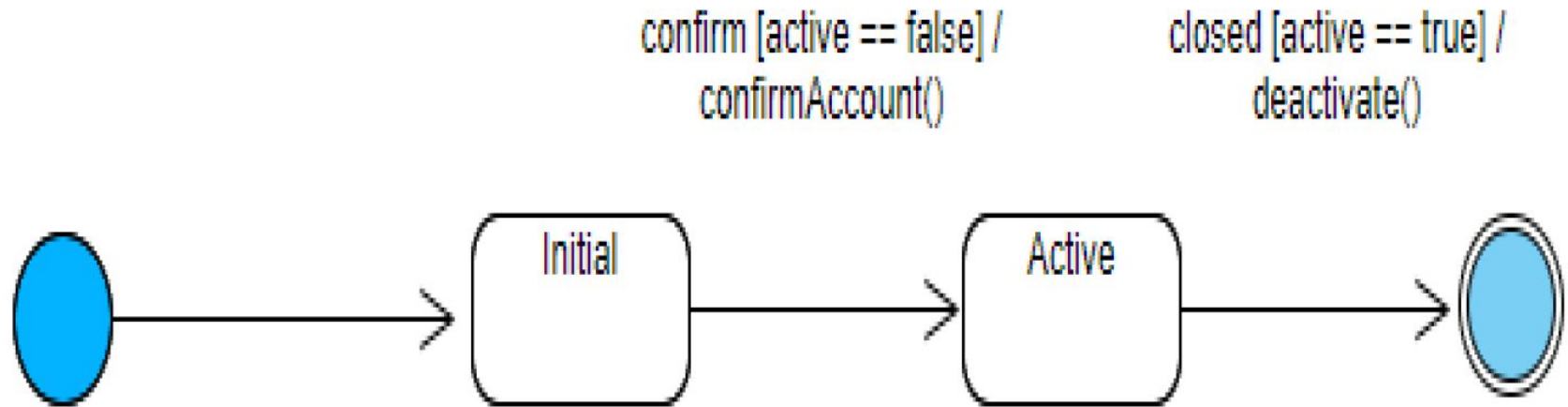
Because these are GUI pages and the GUI interface has no defined attributes at the moment, these are just currently assumed states a webpage may have.

“Initial” refers to the page first requested.

“Rendering” refers the page fetching all it’s necessary resources.

“Displaying” refers to the page displaying all the fetched resources.

State Diagram for Account



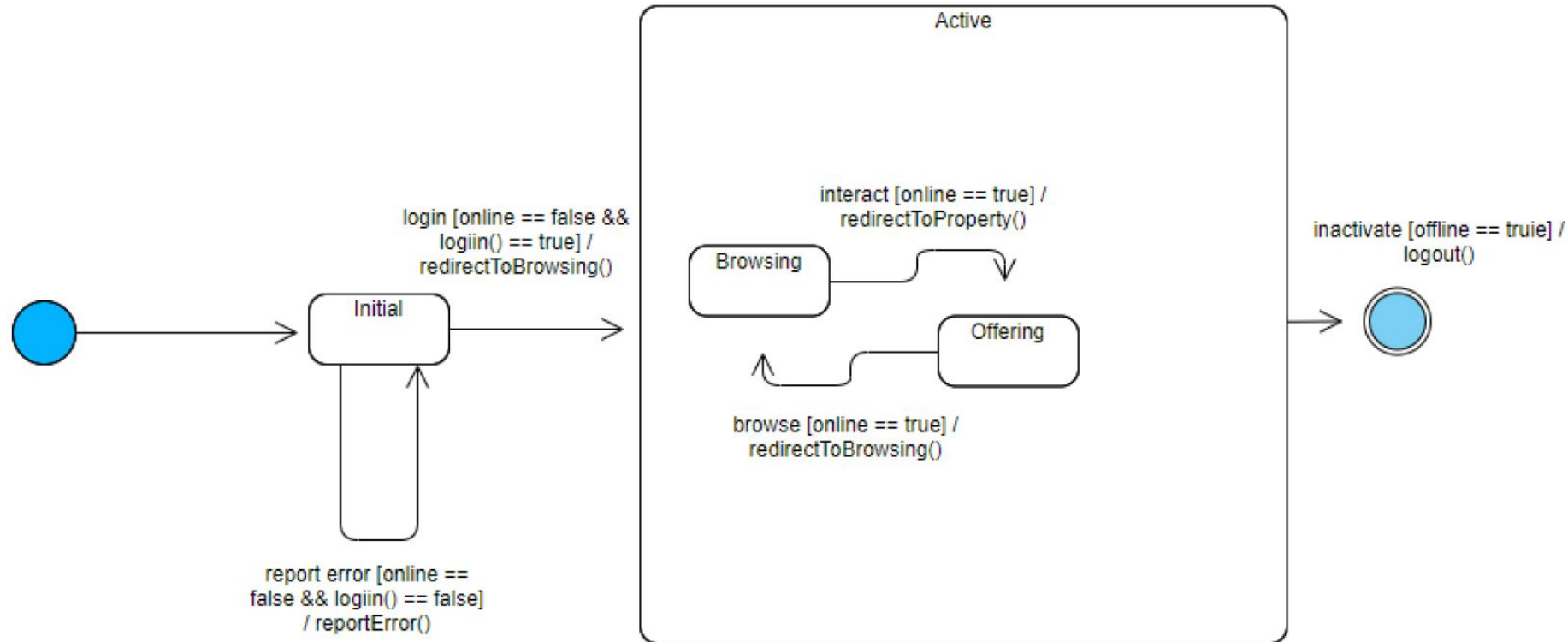
Documentation for the Account object state diagram

“Inital” refers to the account being initialized (active = false)

“Active” refers to an account that has been confirmed but not deleted (active = true)

State Diagram for User, Broker, Customer

Note: Inactivate guard has incorrect text, should be “online == true”



Documentation for User, Broker, Customer object state diagrams

“Inital” refers to the user at the login screen trying to log in (online = false)

- Online refers to a user using their main website services

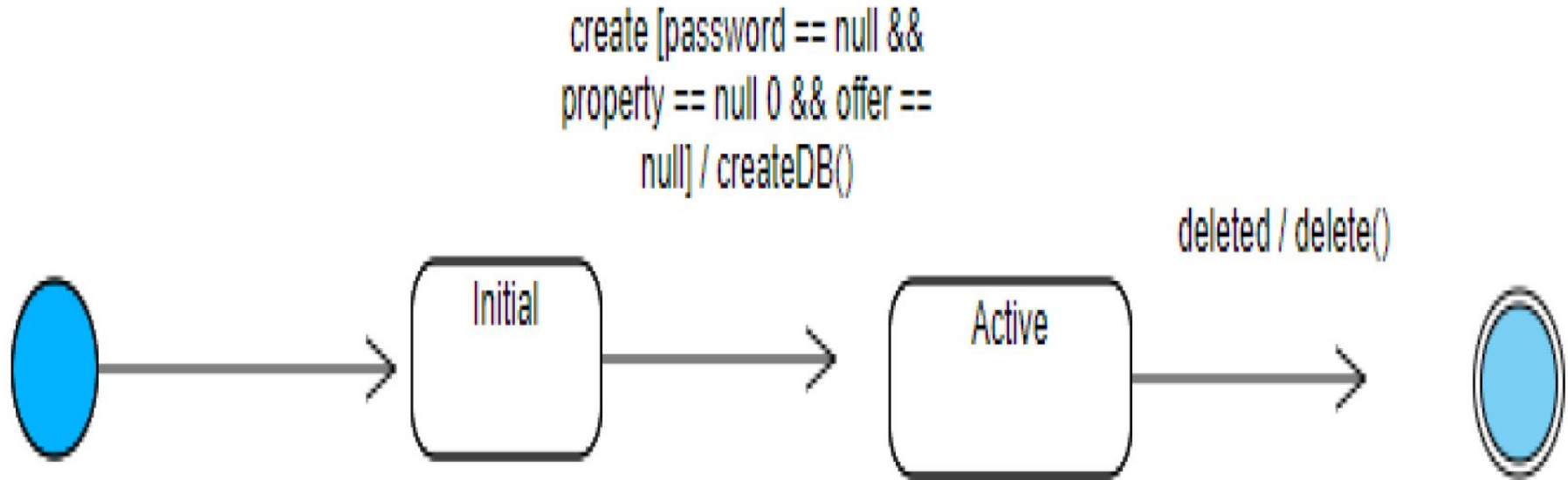
“Active” refers to the user using the main website services (online = true)

- “Browsing” refers to looking at all the properties
- “Offering” refers to the act of interacting with offers
 - User would be determining which type of user
 - Broker would be accepting/denying offers
 - Customer would be completing offers

State Diagram for Database

Note: create [`.. property == null && ...`

`deleted [password.size() >= 0 && property.size() >= 0 && offer.size() >= 0] / delete()`

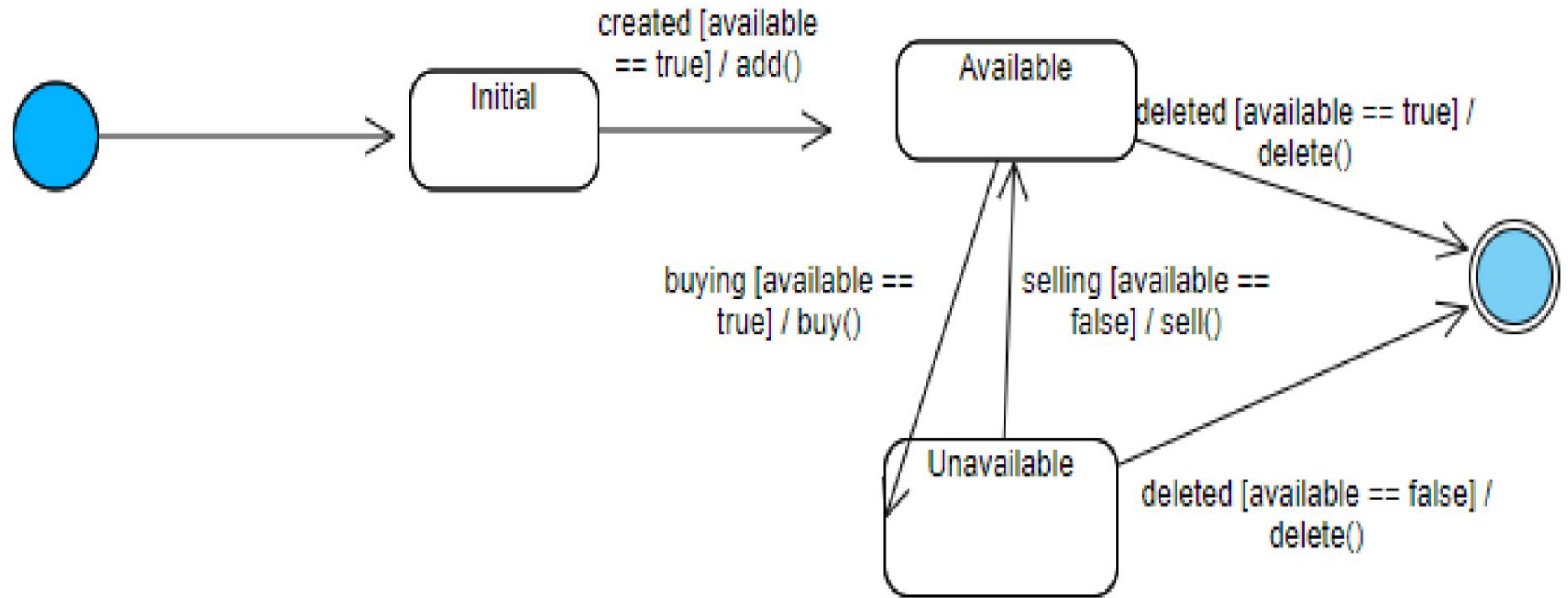


Documentation for Database object state diagram

“Initial” refers to the database connection being established. (password = null, property = null, offer = null)

“Active” refers to the database having created and using tables containing information about the properties, passwords, and offers. (password.size() >= 0, property.size() >= 0, offer.size() >= 0)

State Diagram for Property



Documentation for Property object state diagram

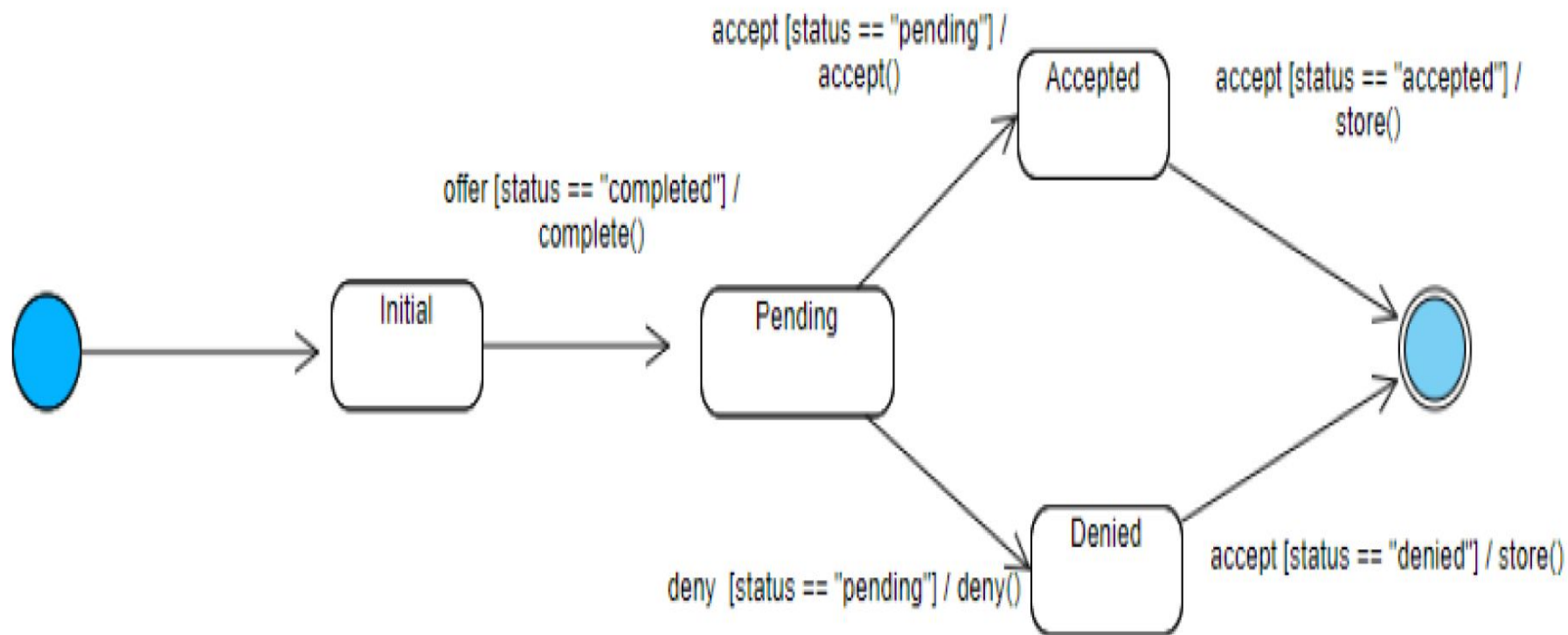
“Inital” refers to the initializing a property object (available = true)

- Available is true because any new properties at first shall be available
 - Not explained, just set as assumption

“Available” refers to the property being available to be bought (available = true)

“Unavailable” refers to the property being off the market to be bought (available = false)

State Diagram for Offer



Documentation for Offer object state diagram

“Initial” refers to an offer being made by a customer (status = “completed”)

- Completed may be a bad name for the status, but chose complete as a temporary name, could be refactored later

“Pending” refers to the offer waiting to get a response back from a broker (status = “pending”)

“Accepted” refers to an offer being accepted by the broker (status = “accepted”)

“Denied” refers to an offer being denied by the broker (status = “denied”)