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CS 746 - Spring 2020

Assignment 1: due February 25, 2020

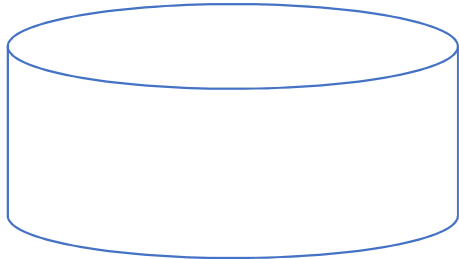
Notation used



External entity that interacts with the software system



Interface providing the service to the external entity



Centralized data store



Read access
(browsing is considered reading)



Request

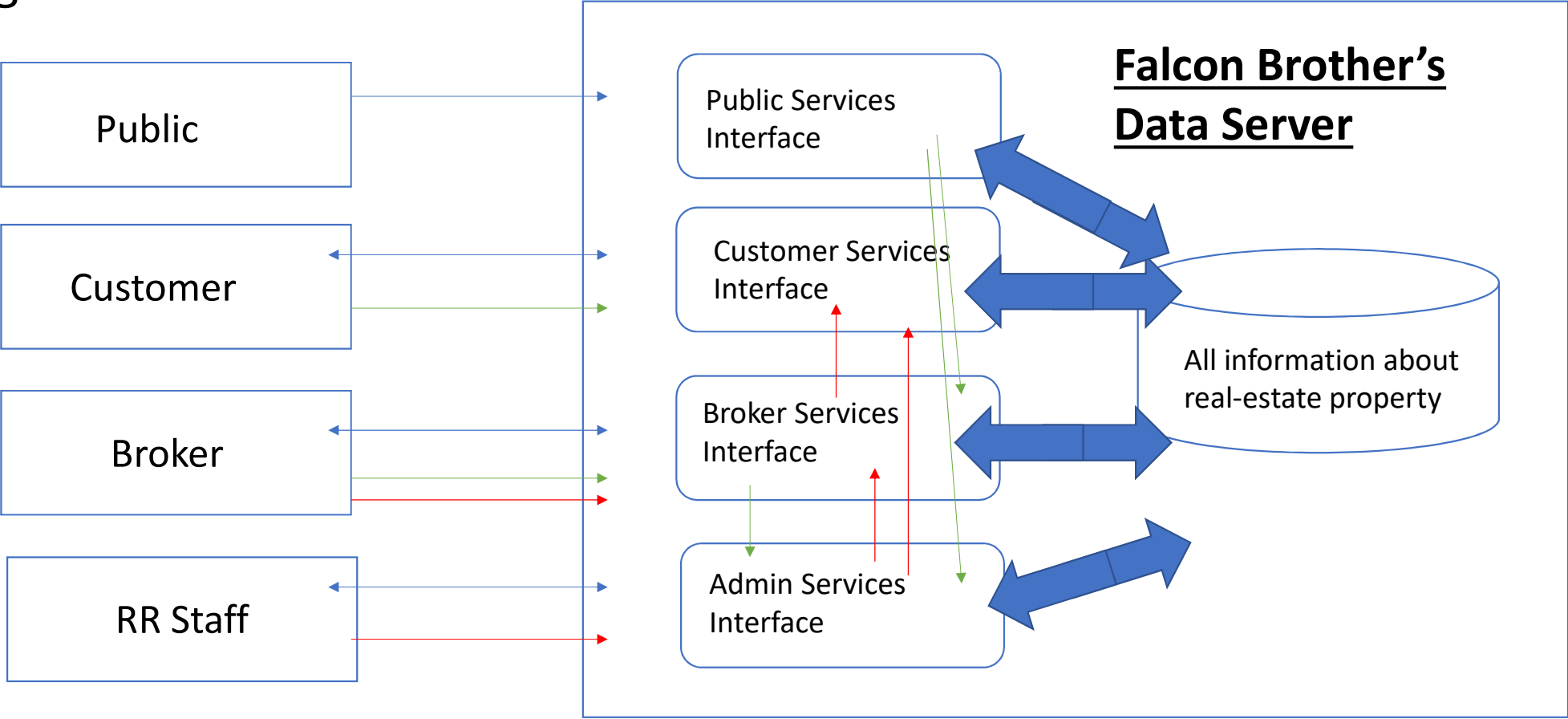


Write access



Internal Data
Communication

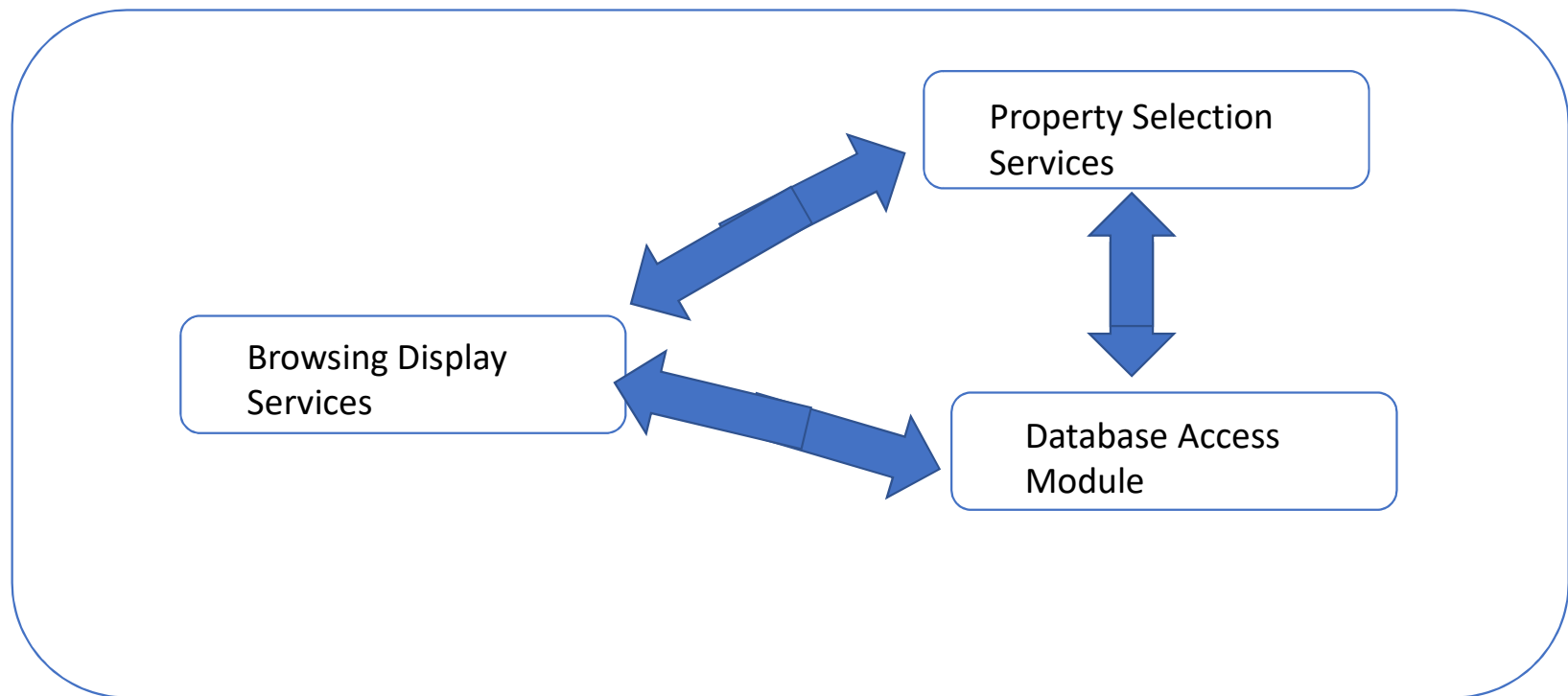
High-level architecture



Partial Refinement of the architecture

– Public Services

Public Services Interface



Partial Refinement of the architecture

– Public Services

Display Browsing Services

Display All Property

Display filtered property

Display property information on
a property

Partial Refinement of the architecture

– Public Services

Property Selection Services

Select all properties based on type (land, building, residential-isolated, etc..)

Select all properties based on address area (door #, city, state, zip code)

Select all properties based on area (sq. ft)

Select all properties based on location range (latitude, longitude)

Select all properties based on valid until (date)

Select all properties based on price range

Select all properties based on residential property (# bedrooms, size of room, # bathrooms, garage, appliances, etc.)

Select all properties based on broker

Select all properties based on combination of multiple selections

Select Information for residential property

Partial Refinement of the architecture

– Public Services

Database Access Module

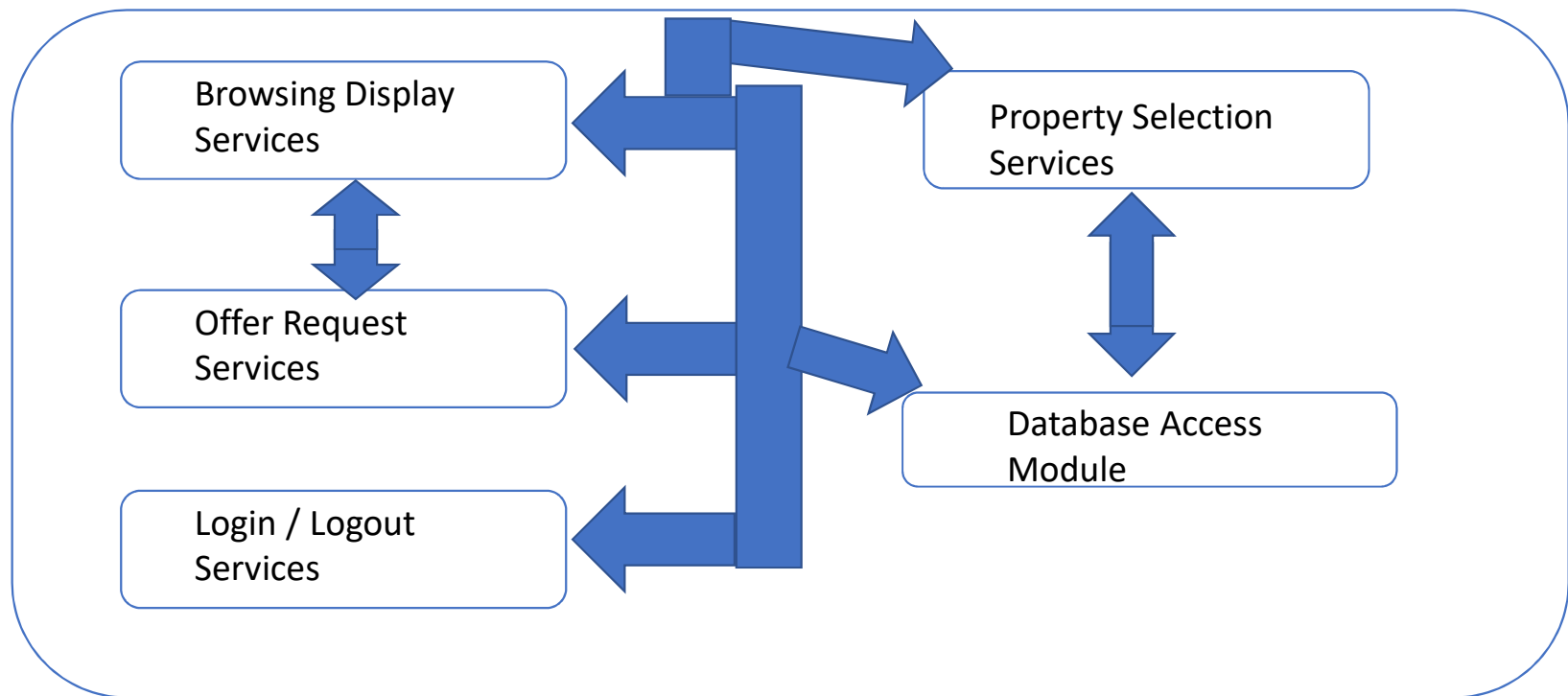
Get all properties that fit select criteria

Get resident property information for that property.

Partial Refinement of the architecture

– Customer Services

Customer Services Interface



Partial Refinement of the architecture

– Customer Services

Display Browsing Services

Display All Property

Display offer Form

Display filtered property

Display all statuses of all offers

Display property information on
a property

Display offer information (their
form info that they submitted)

Partial Refinement of the architecture

– Customer Services

Property Selection Services

Select all properties based on type (land, building, residential-isolated, etc..)

Select all properties based on address area (door #, city, state, zip code)

Select all properties based on area (sq. ft)

Select all properties based on location range (latitude, longitude)

Select all properties based on valid until (date)

Select all properties based on price range

Select all properties based on residential property (# bedrooms, size of room, # bathrooms, garage, appliances, etc.)

Select all properties based on broker

Select all properties based on combination of multiple selections

Select Information for residential property

Partial Refinement of the architecture

– Customer Services

Login/Logout Service

Login Customer Account

Logout Customer Account

Partial Refinement of the architecture

– Customer Services

Offer Request Service

Get form on property

Validate form information

Send form to offers processing
service (admin/broker)

Partial Refinement of the architecture

– Customer Services

Database Access Module

Get all properties that fit select criteria

Get resident property information for that property.

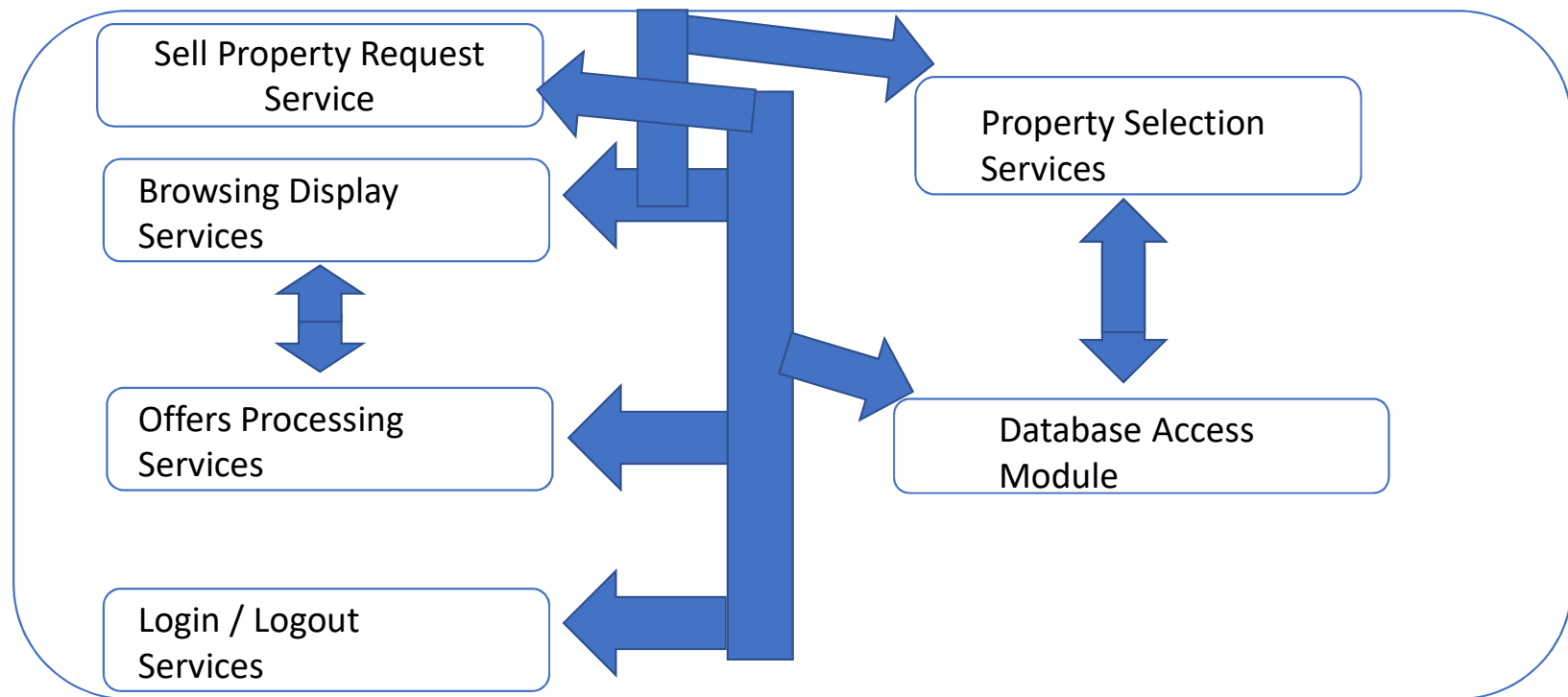
Get all statuses on offers for user

Get offer information for specific offer

Partial Refinement of the architecture

–Broker Services

Broker Services Interface



Partial Refinement of the architecture

– Broker Services

Display Browsing Services

Display All Property

Display all offers

Display filtered property

Display all pending property of
sell requests

Display property information on
a property

Partial Refinement of the architecture

– Broker Services

Property Selection Services

Select all properties based on type (land, building, residential-isolated, etc..)

Select all properties based on address area (door #, city, state, zip code)

Select all properties based on area (sq. ft)

Select all properties based on location range (latitude, longitude)

Select all properties based on valid until (date)

Select all properties based on price range

Select all properties based on residential property (# bedrooms, size of room, # bathrooms, garage, appliances, etc.)

Select all properties based on broker

Select all properties based on combination of multiple selections

Select Information for residential property

Get all pending offers property

Get all to sell request property

Partial Refinement of the architecture

– Broker Services

Login/Logout Service

Login Broker Account

Logout Broker Account

Partial Refinement of the architecture

– Broker Services

Sell Property Request Service

Get form on property to sell

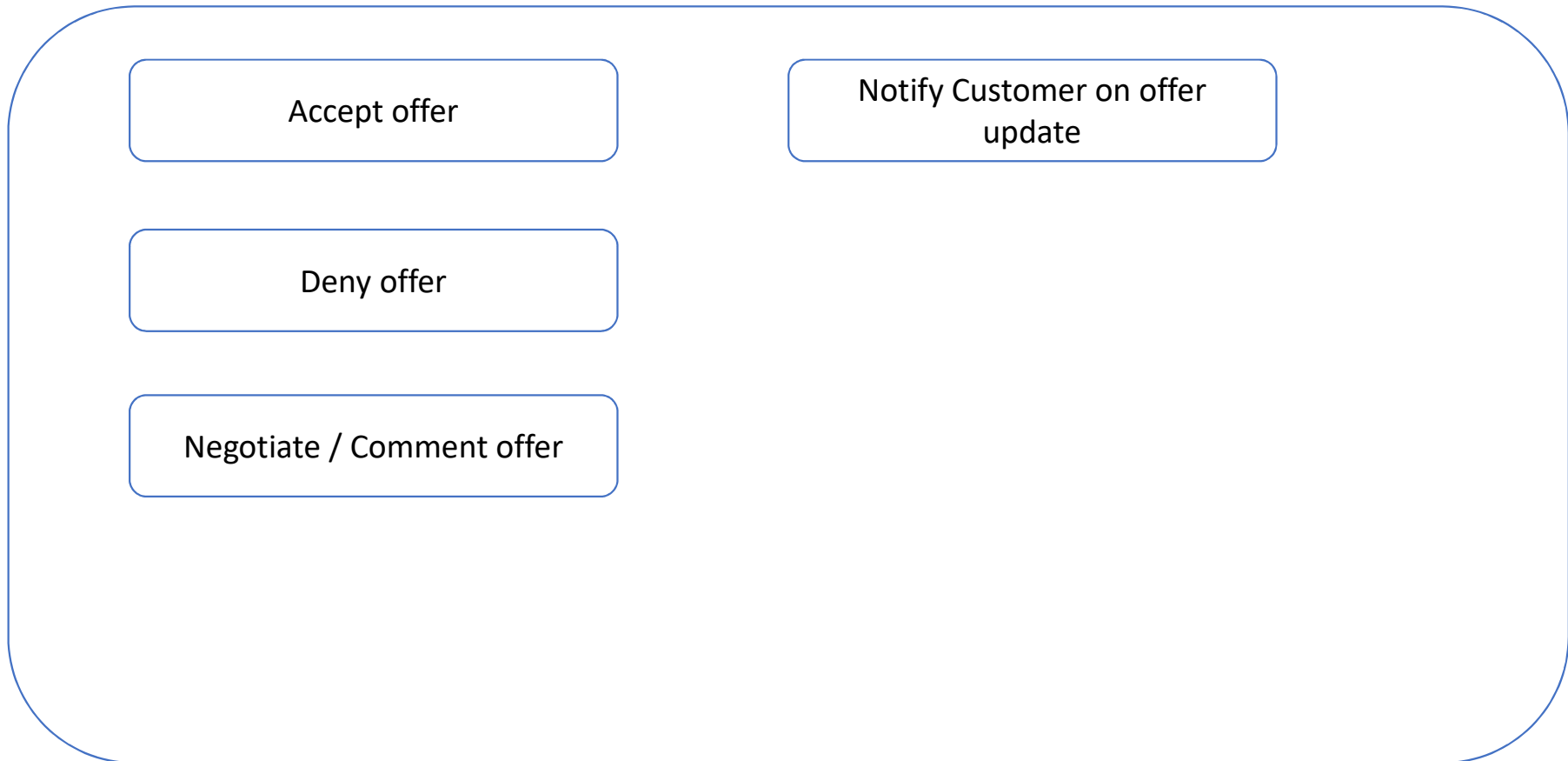
Validate form information

Send to selling property
processing service (admin)

Partial Refinement of the architecture

– Broker Services

Offer Processing Service



Partial Refinement of the architecture

– Broker Services

Database Access Module

Get all properties that fit select criteria

Get resident property information for that property.

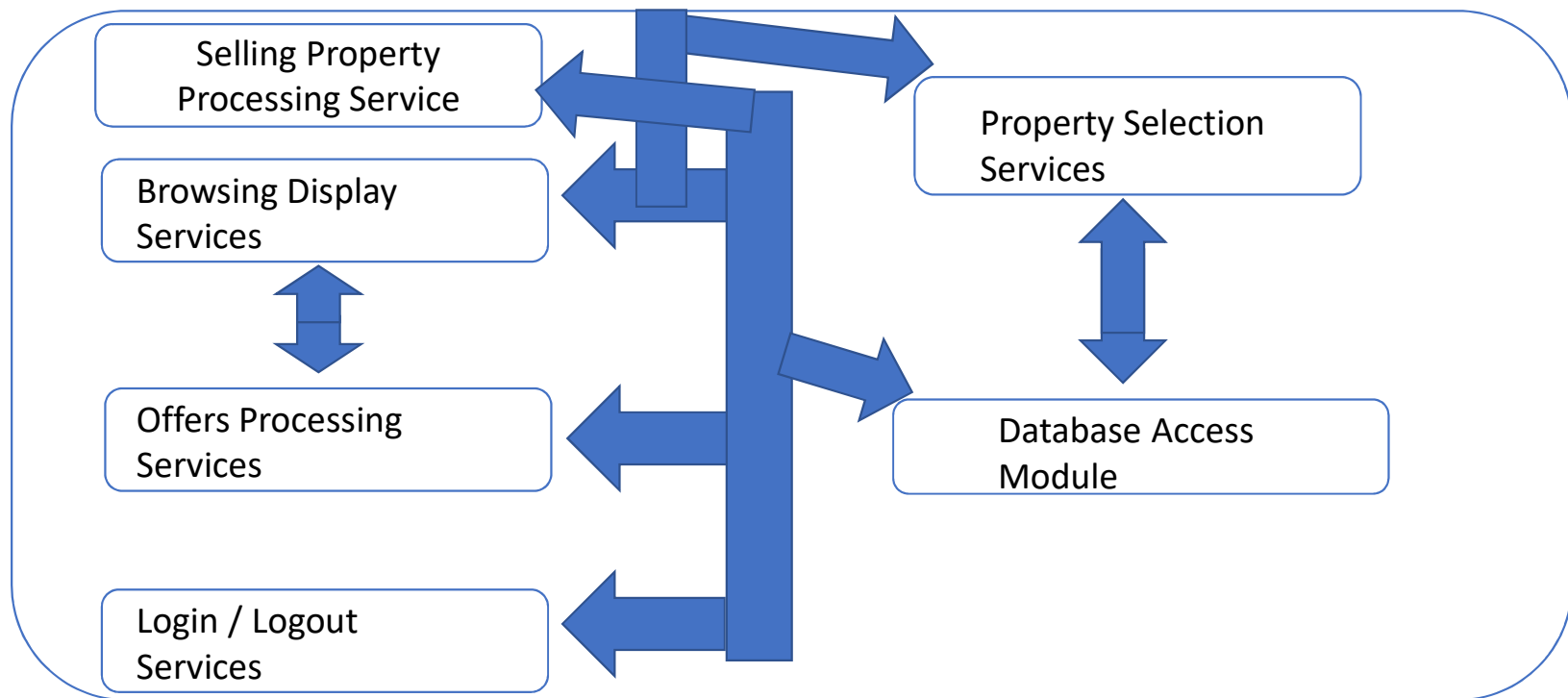
Get all pending properties

Get all pending to sell properties

Partial Refinement of the architecture

– Admin Services

Broker Services Interface



Partial Refinement of the architecture

– Broker Services

Display Browsing Services

Display All Property

Display all offers

Display filtered property

Display all sell property request

Display property information on
a property

Partial Refinement of the architecture

– Broker Services

Property Selection Services

Select all properties based on type (land, building, residential-isolated, etc..)

Select all properties based on address area (door #, city, state, zip code)

Select all properties based on area (sq. ft)

Select all properties based on location range (latitude, longitude)

Select all properties based on valid until (date)

Select all properties based on price range

Select all properties based on residential property (# bedrooms, size of room, # bathrooms, garage, appliances, etc.)

Select all properties based on broker

Select all properties based on combination of multiple selections

Select Information for residential property

Get all pending offers property

Get all to sell request property

Partial Refinement of the architecture

– Broker Services

Login/Logout Service

Login Admin Account

Logout Admin Account

Partial Refinement of the architecture

– Broker Services

Selling Property Processing Service

Accept selling request

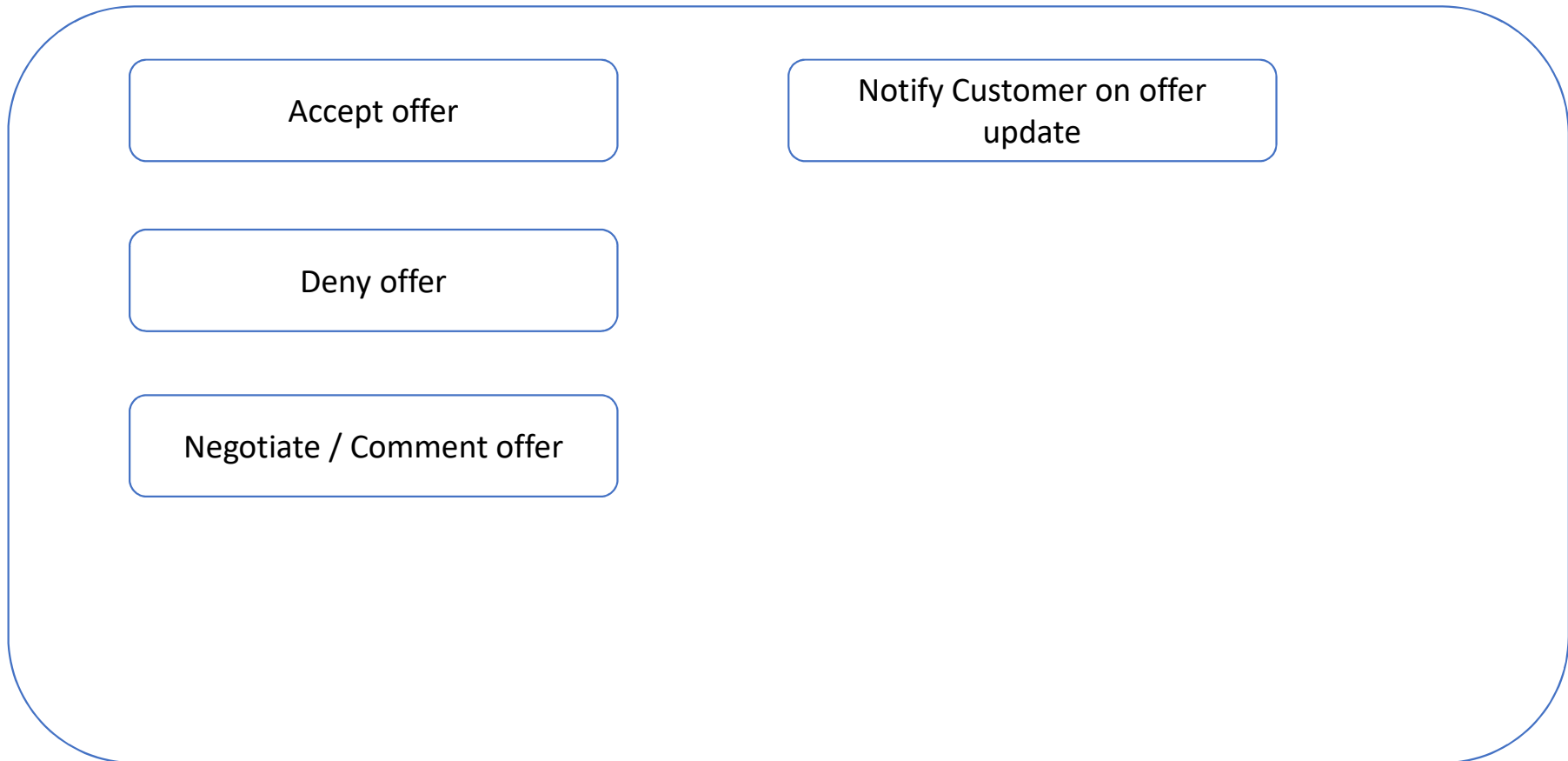
Deny selling request

Notify broker of selling request
update

Partial Refinement of the architecture

– Broker Services

Offer Processing Service



Partial Refinement of the architecture

– Broker Services

Database Access Module

Get all properties that fit select criteria

Add information on property

Get resident property information for that property.

Delete information on property

Get all pending properties

Change information on property

Get all pending to sell properties