

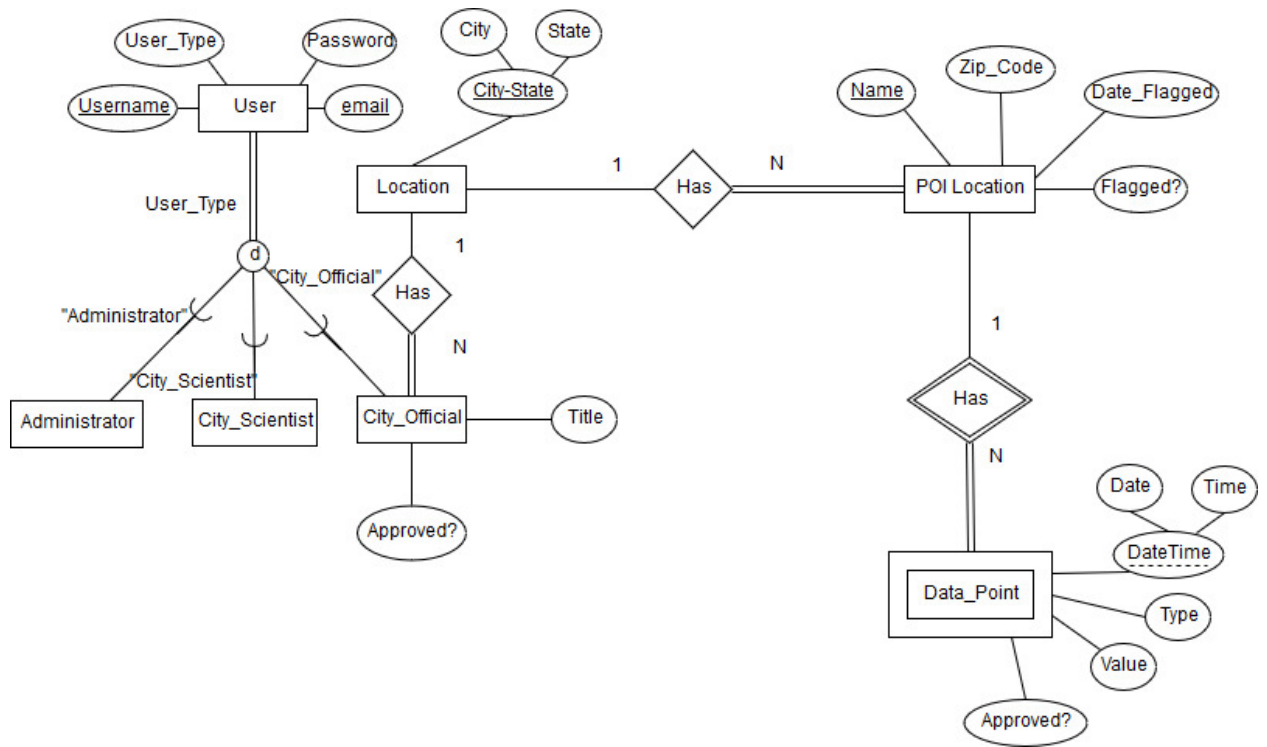


[GROUP 35]

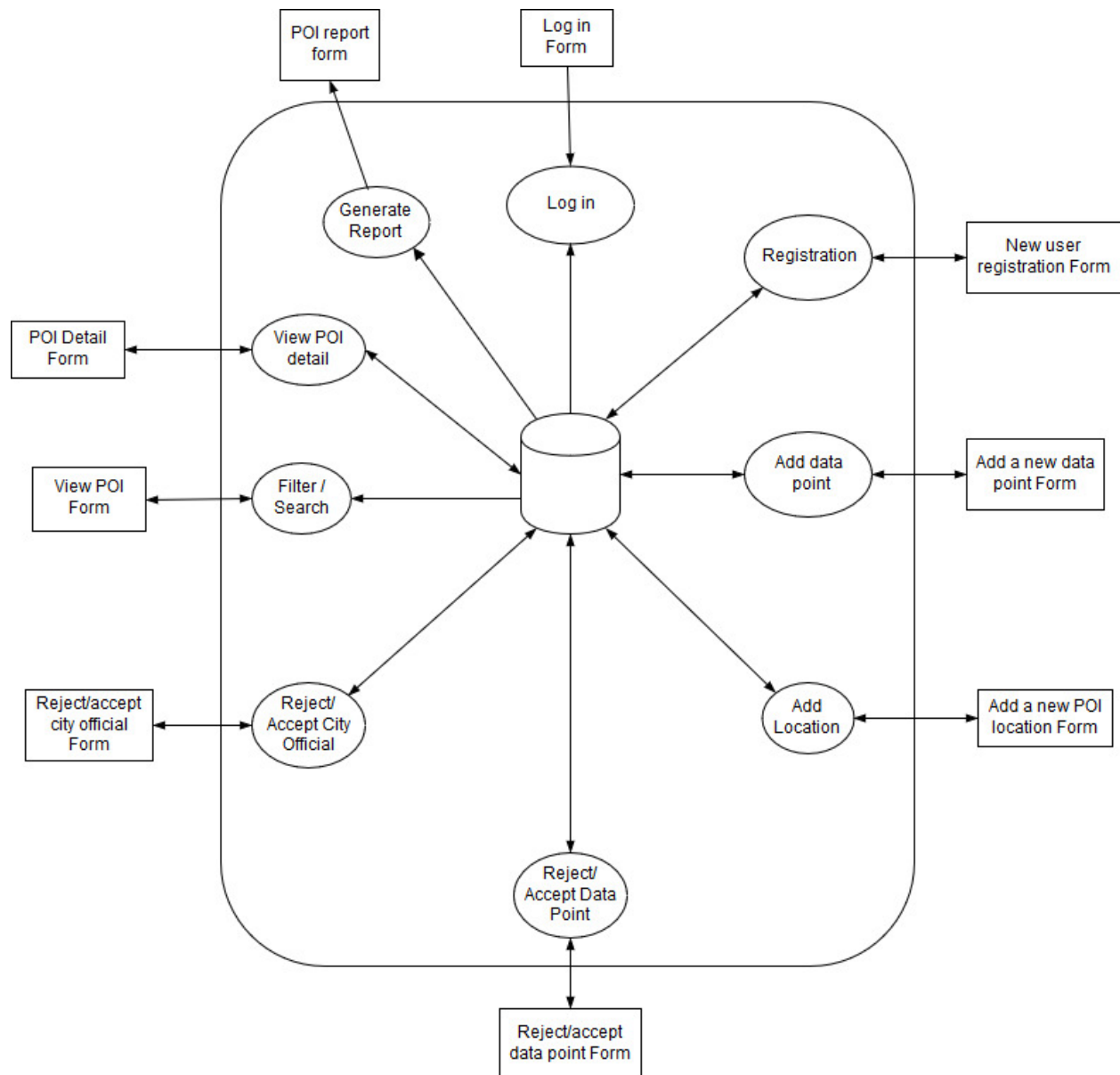
[Phase 1]

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EER Diagram



Information Flow Diagram



Constraints:

- Only city scientists can add new data points.
- Only city scientists can create new POI Locations.
- Only admins can approve/reject data points.
- Only admins can approve/reject new city official accounts.
- City official accounts only need to be approved by one admin.
- Date flagged only stores the most recent date a data point was flagged.
- Only city officials can add/remove flags.
- No attribute of USER can be NULL
- No attribute of LOCATION can be NULL
- No attribute of DATA POINT can be NULL

Assumptions:

- All users must belong to exactly one of the three different types of users.
- The database doesn't need to keep track of which city scientist added a data point.
- The database doesn't need to keep track of which city scientist added a location.
- The database doesn't need to keep track of which admin approved a data point.
- The database doesn't need to keep track of which admin approved a city official.
- The database doesn't need to keep track of which city official flagged a data point.
- The only possible values for the Approved? Attribute both in city official and in data point are PENDING or APPROVED. If an admin rejects a city official or data point that record is deleted but the same record can be added again later on and wait to be approved. In the case of a city official- an individual can attempt to re-register with the previously rejected email address or username. That is, once rejected data points or city officials aren't 'banned' from future registration attempts.
- Since the database stores information on locations and POI locations we assume that it will have to fetch this information when forms are generated that allow data points or city officials to add the city and state. And these forms are in turn used to add new data to the database (i.e. city officials or data points) we have indicated this by showing double arrows for these forms on our information flow diagram.