Phase 2 Report
CS 6400 - Fall 2016
Team 056

The following is a list of changes made to our Phase 1 submission based on instructor feedback and grading. A copy of the revised EER follows on the next page.

IFD
- The arrow from the database to the "Login" task was switched, so that it originates from the database and points <u>towards</u> the "Login" task.
- The arrow from the new incident form was incorrect. It is now a single directional arrow that originates at the form and points towards the "Add Incident" task.
- Changed "Display User Info" task to "Display Main Menu"

EER
- Corrected the "jurisdiction" and "hq_location" attributes for "Company" and "Government Agency" entities, respectively. Attributes were switched in previous submission.
- Condensed model attribute for a Resource, which previously consisted of model name and model number, into a single attribute named model.
- Added a new "Cost Unit" weak entity with single attribute "timeUnit" so that it is extensible without code changes. This has a 1:N relationship with "Resource" since multiple resources could use the same time unit component of cost. "Resource" has a mandatory participation in this relationship. "dollarAmount" attribute is now a direct "Resource" attribute.
- Created a new 4-ary "request" relationship (recursively with 2 users and then with a resource and an incident) with attributes "startDate", "duration", and "type". This is to more accurately represent the relationship between a user, incident, and resource since requests for a resource must first be linked to an incident. Repairs are also captured in this relationship. Cardinality is 1:1:1:1. Attribute "type" is to distinguish between repair or borrow requests.
- Removed the "assigns" relationship; functionality now covered by "request" relationship.
- Removed the "request, deploy, and reject" relationship. This functionality now covered by "request" relationship.
- Removed the "repair" relationship. This functionality now covered by "request" relationship.

Phase 2 Revised EER
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population_size — Municipality

job_title, hire_date — Individual

hq_location — Company

jurisdiction — Government Agency

d

owns

latitude, longitude — location — N — Incident — ID, description, date

name, username, password — User

owns — 1

request — Start_date, End_date, type

1, 1, 1, 1

owns — N

availDate, model — Resource — capabiltiies, name, status, ID, cost_amt

latitude, longitude — location

Has Primary — N — 1

Has Secondary — N — M

Has A — N — 1

ESF — ESFID, ESF_desc

Cost Unit — timeUnit