#### Database Systems (22C:144)

**Part 4: Database Implementation**

**Due: 05/03/2017**

**Group 05**

**Suhas Kumar, Kaustubh Mungale, Cody Hoffman, Wei Wei**

**Web interface:** [**http://webdev.cs.uiowa.edu/~cjhoffman/**](http://webdev.cs.uiowa.edu/~cjhoffman/)

**This document will provide the folder structure of the deliverable made as part of this submission along with the individual contributions for the deliverable, followed by the discussion points.**

**This deliverable will have a documentation on the schema which includes the information of the implemented indices and triggers along with the explanation.**

**A SQL file which will hold the drop scripts of the tables that we created as part of the project, this file is used after we create the tables or run the create table scripts, this was created to make clear all the tables before we implement the database completely from scratch.**

**A SQL file with the table create scripts, which are used to create all the table used in the project and also another SQL file holding the insert scripts which will hold some dummy data insert commands to the table which are used in computing the queries deployed in the web portal.**

**A document describing MongoDB structure is included.**

**Updated project description document (this was missed as part of our previous submission)**

**Individual contributions to this deliverable:**

***Suhas Kumar:***

* Worked on implementing ER model and implementing normalization.
* Designing MongoDB model for the project.
* Worked on documentation and constructing complex SQL queries.

***Kaustubh Mungale:***

* Worked on finding functional dependencies, implementing schema (Paired with Cody)
* Designing of tables, formatting complex queries and resolving the same.
* Worked on MongoDB model implementation (paired with Suhas)

***Cody Hoffman:***

* Designed **schema.sql** file (paired with Kaustubh)
* Created test data in **insert.sql** file
* Created PHP file to serve links to each query
* Helped select and write the three queries (everyone was involved in this)

***Wei Wei:***

* Created the test data for insert in SQL.
* Complete the implementation documentation.
* Helped the team implement the SQL queries.

**Notes from group meeting/discussion:**

* Meeting to distribute work and update periodically.
* Discussion on designing and implementing ER Model.
* Discussion on relational model implementation, finding functional dependencies and working on normalization.
* Discussion on building schema for the database and implementing the same.
* Meeting to design queries, implementing the same and integrating on DIVMS using PHP.
* Discussion on the MongoDB document structure.