Project Scope

Note: This document is intentionally incomplete and is in non-standard format; as part of the course details on requirements will be provided when asked.

Project Scope:

www.weather.com

The data model should be designed in such a way that users can themselves search for the weather near their Zip code or along a route for various periods of time

The goal of this phase of project is to create a robust data model and design the database using the principles of our course. And to develop a web application interface to as many functions as possible.

1. Objectives and capabilities of this tool are as per weather.com

- a. Location Management
- b. Select Temperature scale
- c. Search for a location
- d. Assume common attributes of each item to be listed.
- e. System Administrators can do any of the functions
- f. User Feedback, ranking on condition of resource can be maintained

An urgent requirement is build a state of the art web / mobile application for above integrated software application. Time to market is a critical constraint. An iterative approach is probably ideal. The goal is to build an integrated System. A first step is to gather more detailed requirements and build a good data Model and design the Normalized database catering to excellent performance in a totally secured environment.

The key is to come up with a good efficient database design which can support both Mobile and Web browser environments. The user interface is important but not every screen is required in Phase 1, as the focus is on database.

Full software must be implemented by semester end which means that a well tested demo system must be launched that time. Customer prefers to see intermediate versions of the proposed software. ER Model, Normalized Database, DDL scripts, Database Objects, Screens, Navigation and some of these functions must be delivered in that order. We request you to work out the delivery details in consultation with Customer contacts.

Customer contacts will provide additional details of requirements, if requested by the Project team.

Project Scope

Customer contacts:

Teams are encouraged to work out a schedule to meet Customers or as per arranged schedule to be announced by Customer. Office hours may be used for meetings.

Team #	Primary Customer contact	Alternate Customer contact	
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General Requirements:

- 1. The tool should be user friendly & require minimal data entry. The Software development team and the Business analysts are required to suggest the specific user friendly features while drafting the User Requirement Specifications. Some examples of user friendly features may be
 - a. minimum data entry
 - b. data transfer from context sensitive help screens
- 2. The system must support user Id / Password based authentication and must offer the best security features. The software development team is required to identify (in URS) the specific security features to be incorporated in software. Some examples of such security features may be
 - a. Data encryption techniques (128 bit)
 - b. Invisible password
 - c. Structure of Password
 - d. Password change policy
 - e. User Id / Password retrieval policy

Non Functional and Operational requirements from project team:

- 1. Each Team must pick a Team Leader and may pick a corporation name
- 2. Team work is very important.
- 3. Team members must have regular meetings each week.
- 4. Meetings should be well planned and should preferably be less than 15 minutes in each meeting.
- 5. It is highly recommended that teams meet once after class every week.
- 6. Distributed teams are a matter of fact; technology should be used to meet from remote, if it is convenient.
- 7. Team must submit more detailed schedule and get it approved.
- 8. The work done in each stage of software development must be acceptable to the customer.
- 9. All members of the team must assume specific responsibilities.
- 10. The customer must be informed of the Roles and Responsibilities
- 11. The tools required for the project will NOT be provided by the customer.
- 12. Due to acute shortage of resources, the customer is able to meet with project teams only on a pre-arranged basis during regular office hours.
- 13. Use of Stored procedures must be maximized.
- 14. All documents must be delivered using ICON drop box.
- 15. Teams must develop the Screens and demo the screen flow before developing the full software.

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Specific Deliverable schedule: [Due dates to be decided with class, TA]

#	Deliverable Description	Due date	Weight %		
1.	Project Plan (couple of pages) with Schedule				
2.	Data Attribute collection		5		
3.	. User Requirement Specification (URS) Usecases		10		
4.	4. Test Plans , Testing		10		
5.	ER Model (15%), Normalized database (10%)		25		
6.	High Level Design (screens, database, architecture,		20		
	De-Normalizations if any) Design must be derived				
	from model				
7.	Working software deliverable Iteration 1	3/21/18	10		
8.	Working software deliverable Iteration 2 - Final	4/22/18	10		
9.	Final Team Presentations		5		
10.	Team work		5		

[Items 1-3] Project – Functional / User Requirements /Data Attribute

- a. List all functions and describe it briefly
- b. For each Function list all Data Elements (Input, Output, Persisted or not)
- c. For each Data element identify (Data type, Validations, Domain, Constraints, **Key or Not, Size, usage etc.)**

For Project Meeting (Be on time, don't skip without prior approval)

- a. What you did this week, where you need help, problems faced etc.
- b. What you plan to complete next week

[Items 4] Test Pan

- 1. How you plan to test tool and its components (stored proc, queries)
- 2. Test Strategies (100%, Black box / white box testing)
- 3. Unit, Module, over all functional
- 4. Traceable to requirements
- 5. 5 Column Test Conditions (Condition, Expected Result, Observed Result)

#	Requirement tested	Condition	Expected Result	Observed Result

[Items 5] E-R Model, Normalization [TBA]

[Items 6] DB Design [TBA]

[Items 7-8] Code and Software

Don't submit it in ICON; Demo it to TA / me; we will ask for code selectively

Iterations - Deliverables

Iteration #1: Screens, Db, Test plans, some data pull, over all architecture

Deliver for the functions included in the iteration

Iteration 2 (Full) – Both should be working software

Suggestion: In each iteration, carry out steps 2-6. So incremental requirements will be given and agile experience can be provided.

Due Dates flexible within indicated dates

Project Scope Revision Log

Date	Version	Description of change	