Computer Science Department
University of Computer & Emerging Sciences (NUCES-FAST)

HOME WORK ASSIGNMENT COVER SHEET

COURSE TITLE	Software Engineering	COURSE CODE	CS3005
INSTRUCTOR	DR. EJAZ AHMED	TYPE	☐ Indiv. ☑ Group (Please tick)
ASSIGNMENT NO	HW-1 (Class)		
ASSIGNMENT	Documents Dispatch Register (DDR)		
HAND OUT DATE	13-MAR-2023	DUE DATE	21-MAR-2023
ESTIMATE TIME	10 Hours		

ASSESSMENT CRITERIA (or attached)	% Mark
Questions are attached (print copy)	
This HW includes the following tasks (Total Marks 7.5)	
Assignment-1-Deliverable-1 Due on FRI 17/03/2023 4pm CS Acad Office/ Amir	
Assignment-1-Deliverable-2 Due on MON 27/03/2023 4pm CS Acad Office/ Amir	
Submission: Only paper submission is required	
Group of max 3 students is allowed, individual work is discouraged with 10% deduction	

TO BE COMPLETED BY STUDENT (TEAM LEAD)

NAME   Maria Saeed Ahmed

ID NO   20I-0836   Section# A

Time Taken

DECLARATION: I/We declare that this Coursework is my/our group's own work

SIGNATURES (All members)

GROUP MEMBERS ID

ID 20I-1826	Sec# A
ID 20I-0634	Sec# A
ID	Sec#

GRADE/ MARK AWARDED   ☐

COMMENTS   _____

INSTRUCTOR'S SIGNATURE _____   DATE _____

Brief:

One of the feature of Agile Approach to meet the user face to face and prepare your requirements. Assignment's introduction has been demonstrated in the class and record video.

You are required to submit the following deliverables:

User Requirement Definition (Assignment-1- Deliverable-1)
System Requirements Specification (Assignment-1 Deliverable-1)
Functional Specification (Attributes) (Assignment-1- Deliverable-2)
User Stories - Functional Artifacts) (Assignment-1- Deliverable-2)
Prototype Models/ Processes & Prototype UIs Hand written) (Assignment-1- Deliverable-2)

Functional Specification Attributes details – Sample

Sem_ID	Semester identifier with campus id	INDX U, FK	CHAR(8)	Ref. COURSE_Offer.Sem_ID
Course_ID	Course identifier	INDX U, FK	CHAR(8)	Ref. COURSE_Offer.Course_ID. This also includes lab sections as well but no variations are allowed for rest of sections of each of theory and lab.
Section	Course and lab section	INDX U, FK	VC2(2)	Ref. Course_offer.Section. Class sections A, B, C, ... and lab sections 01, 02, 03, .. Student should not select more than one class section or lab section in one semester. Need function to return flag to enter lab section
Eval_ID	Evaluation identifier	INDX U, FK	CHAR(2)	For example, 01:Assignment, 02: Quiz etc.

User and System Requirements:

1. System must be able to track a document.
   1.1. The system must have the ability to assign a unique identifier to each document to ensure its traceability.
   1.2. The system must maintain a record of the current location and status of each document in real-time.
   1.3. The system must provide a centralized dashboard for users to view the location and status of documents across the organization.
   1.4. The system must be able to generate alerts and notifications to relevant users when a document has not been processed for a specific period or if the document is a priority document.

2. System should be able to search based on different fields.
   2.1. The system must have a search functionality that allows users to search for documents based on different criteria such as document number, type, sender designation, sender name and department.
   2.2. The system must provide advanced search capabilities that enable users to search for documents based on combinations of criteria, including date ranges.
   2.3. The system must display search results in a user-friendly manner and allow users to sort and filter the results based on specific parameters.

3. User should be able to set priority of document.
   3.1. The system must allow users to set priority levels for each document based on pre-defined levels such as high, medium, or low.
   3.2. The system must provide a mechanism to ensure that high-priority documents are processed with greater urgency than low-priority ones such as periodic alerts to the department where the document is.
   3.3. The system must enable users to view the priority level of each document and sort them based on priority level.

4. System must be updated when document leaves and enters a department.
   4.1. The system allows user to manually update the system with status of each document when it moves from one department to another.
   4.2. The system allows the department it is moving out from to enter the new department it is going to.
   4.3. The system ensures the next department confirms receiving the document.
   4.4. The system must notify the relevant users when a document enters or leaves their department.
   4.5. The system must provide a log of all document movements and statuses, including time-stamps and user details.

Functional Specification (Attributes):

Attributes	Data Type	Description
DocId/TrackingNumber	int	Unique ID for a document through which it can be tracked
DocType	char (255)	The type of document for example leave, absence justification, grade change request etc
DocStatus	char (255)	The current status of the document, such as under review or approved.
DocLocation	char (255)	The department at which the document is at currently waiting to be processed
SenderID	char (255)	The ID of the person who is giving the document for processing. For students and alumni this can be their roll numbers while for staff it can be their staff number
SenderType	char (255)	It is the category of sender: alumni, current student or staff
SenderName	char (255)	Name of the document sender
SenderPhone	int	Phone Number of the sender
SenderEmail	char (255)	Email of the sender of the document
DocSubmissionDate	date	Date on which the document will be submitted
DocPath	char (2000)	To store the names of the departments through which the document has been processed through
Priority	boolean	Indicates if the documents is one that must be treated as a priority

User Stories:

1. As an administrator I want to be able to insert a document and system to assign a unique ID to it so I can track the document.

2. As a user, I want the system to keep track of each document's location and status in real-time so that I can track its progress.

3. As an administrator, I want a central dashboard that shows the location and status of documents throughout the organization so that I can find the information I need quickly.

4. As a user, I want to be able to sort and filter search results based on specific criteria and the result to be displayed in a user-friendly manner so I can quickly find the information I need.

5. As a user, I want to be notified when a document hasn't been processed for a certain amount of time or if it's a priority document so that I can take the necessary action.

6. As a user, I want a mechanism that ensures high-priority documents are processed with greater urgency than low-priority ones, such as periodic alerts to

the department where the document is, so that urgent documents are handled and processed in time.

7. As a user, I should be able to manually update its status when a document moves out of the department to another so that I can make sure of its precise location and status.

8. As a user, I want the system to provide a log of all document movements and statuses, along with time stamps and user information in order to track each document's progress within the system,

9. As a administrator, I want the system to provide a log of all document movements and statuses, along with time stamps and user information in order to track each document's progress within the system

10. As a user, I want a confirmation system that ensures receiving the document in the next department so that its location and status are accurately reflected within the system.

Doc Track

Add record

Search record

edit record

view records

Log in

username

password

2) Insert Page

```
Doc Insertion

Name:
            [                    ]

DocType:
            [                    ]

Priority:
            [                    ]

Next Department:
            [                    ]

Path:
            [                    ]
                            [NEXT]
```

3) Search DOC Status/Location

Enter ID [____]

ID	Title	Location	Status

BACK