FINAL 3005 PROJECT RUBRIC

Conceptual Design	**Full Correct Coverage**	**Minor Mistakes**	**Missing Assumptions**	**Many Mistakes**	**Poor Representations**	**Criterion Score**
Entity Sets	Based on the students' assumptions and requirements coverage, the group members mention all the required entity sets with the correct type (Regular Entities or Weak Entities).	Based on the students' assumptions and requirements coverage, the group members mentioned all the required entity sets, with most being correctly classified as either Regular Entities or Weak Entities. However, there may be minor mistakes in the classification of some entity sets or possibly one or two entity sets missed altogether.	The group members omitted the necessary assumptions for completing their design, making it challenging to understand the rationale behind some of their decisions.	The group members attempted to identify the entity sets in this step; however, the majority of them were incorrect, unrelated to the project, lacking crucial details according to their assumptions, and/or not represented accurately with the correct symbols, making them challenging to identify.	It is clear that the group members are not aware of how to extract and represent entity sets in an ER model.	/ 6.67
Relationship Sets	Based on the students' assumptions and requirements coverage, the group members mentioned all the required relationship sets with the correct cardinality and participation types.	Based on the students' assumptions and requirements coverage, the group members mentioned all the required relationship sets with the correct cardinality and participation types. However, there may be minor mistakes or possibly one or two relationship sets missed altogether.	The group members omitted the necessary assumptions for completing their design, making it challenging to understand the rationale behind some of their decisions.	The group members attempted to identify the relationships in this step; however, the majority of them were incorrect, unrelated to the project, lacked crucial details according to their assumptions, and/or were not represented accurately with	It is clear that the group members are not aware of how to extract and represent relationships in an ER model.	/ 6.67

				the correct symbols, making them challenging to identify.		
Attributes	Based on the students' assumptions and requirements coverage, the group members mentioned all the required attributes with the correct type (simple vs composite, single vs multi-valued, simple vs derived), and appropriately identified the primary key.	Based on the students' assumptions and requirements coverage, the group members mentioned all the required attributes with the correct type (simple vs composite, single vs multi-valued, simple vs derived), and appropriately identified the primary key. However, there may be minor mistakes or possibly one or two attributes missed altogether.	The group members omitted the necessary assumptions for completing their design, making it challenging to understand the rationale behind some of their decisions regarding attributes.	The group members attempted to identify the attributes in this step; however, the majority of them were incorrect, unrelated to the project, lacked crucial details according to their assumptions, and/or were not represented accurately, making them challenging to identify.	It is clear that the group members are not aware of how to classify and represent attributes effectively in an ER model.	/ 6.67

Reduction to Relation Schema (Based on their ER model)	**Full Correct Mapping**	**Minor Mistakes**	**Many Mistakes**	**Missing/Incorrect**	**Criterion Score**
Step 1 – Regular Entities:	Completely correct and accurate.	Minor mistakes (less than 10%).	Many mistakes (more than 10% and less than 50%).	It is entirely incorrect or has been missed.	/ 3.33
Step 2 – Weak Entities (If Any; Otherwise, Assign Maximum Grade for This Point):	Completely correct and accurate.	Minor mistakes (less than 10%).	Many mistakes (more than 10% and less than 50%).	It is entirely incorrect or has been missed.	/ 3.33
Step 3 – 1:1 Relationships (If Any; Otherwise, Assign Maximum Grade for	Completely correct and accurate.	Minor mistakes (less than 10%).	Many mistakes (more than 10% and less than 50%).	It is entirely incorrect or has been missed.	/ 3.33

This Point):					
Step 4 – 1:N Relationships (If Any; Otherwise, Assign Maximum Grade for This Point):	Completely correct and accurate.	Minor mistakes (less than 10%).	Many mistakes (more than 10% and less than 50%).	It is entirely incorrect or has been missed.	/ 3.33
Step 5 – N:M Relationships (If Any; Otherwise, Assign Maximum Grade for This Point):	Completely correct and accurate.	Minor mistakes (less than 10%).	Many mistakes (more than 10% and less than 50%).	It is entirely incorrect or has been missed.	/ 3.33
Step 6 – Multi-valued attribute (If Any; Otherwise, Assign Maximum Grade for This Point):	Completely correct and accurate.	Minor mistakes (less than 10%).	Many mistakes (more than 10% and less than 50%).	It is entirely incorrect or has been missed.	/ 3.33

Normalization	**Full – 2NF & 3NF Proven Correctly**	**Minor Mistakes**	**Many Mistakes**	**Missing/Incorrect**	**Criterion Score**
Normalization	Student demonstrates normalization to 2NF and 3NF, OR provides proof that the schema already satisfies both forms. The submission must include evidence of no partial dependency (2NF) and no transitive dependency (3NF).	Student attempted normalization and provided justification, but some proofs are incomplete or missing (e.g., partial dependency explanation missing for one table).	Student claims 2NF/3NF or decomposed tables but did not provide sufficient proof (statements like “already normalized” without justification).	No normalization provided, proof absent, or normalization applied incorrectly.	/ 10

DDL (or ORM Equivalent)	**Full Correct**	**Minor Mistakes**	**Many Mistakes**	**Missing/Incorrect**	**Criterion Score**
DDL (or ORM Equivalent)	Schema is fully correct with appropriate data types, primary	Mostly correct but contains small issues (≤10% of schema).	Large design issues (10–50%). Missing keys/constraints for	Tables/models missing or incorrect. No usable schema	/ 10

	keys, foreign keys, and constraints. If ORM is used, models must correctly define relationships (FKs), constraints, and data types equivalent to SQL. Additionally, at least one view, one trigger, and one index are created/implemented OR clearly justified if handled automatically by ORM framework.	Minor datatype mismatch, missing constraint on 1–2 attributes, or partially correct ORM model mapping. Views/trigger/index may exist but not fully justified/implemented.	several tables or ORM relations unfinished. Views/trigger/index missing or implemented incorrectly.	OR no proof of correctness. Views, triggers, and indexes not attempted.	

DML (or ORM Seeding/Operations)	**Full Correct**	**Minor Mistakes**	**Many Mistakes**	**Missing/Incorrect**	**Criterion Score**
DML (or ORM Seeding/Operations)	Data insertion or ORM seeding fully supports system functionality. Enough sample data to demonstrate queries, views, triggers, and dashboards.	Data is relevant but not sufficient for full demonstration OR a few incorrect values.	Data insufficient, unrelated, or incomplete – features cannot be tested properly.	No data, broken inserts, or ORM seed failure.	/ 10

Code Implementation (Accepting any student interpretations)	**Excellent — Full Feature Implementation**	**Good — Minor Gaps or Small Bugs**	**Satisfactory — Several Functions Missing**	**Poor — Limited Functionality**	**Very Poor — Non-functional System**	**Criterion Score**
Code Implementation (Accepting any student interpretations)	All core functions are implemented correctly and fully working. Features match or exceed expected scope for the group size. Strong validation and constraints enforced; system handles invalid input and edge cases gracefully. User roles separated correctly with restricted views/actions per role.	Most required functions are implemented with only minor missing features or small correctness issues. Validation present but not	Multiple required functions partially implemented or missing. Validation weak or absent for several operations. Role separation	Very few functions are implemented or the system does not perform core operations reliably. Many functions are broken or incomplete.	Application fails to run, majority of actions not implemented, or nothing beyond	/ 20

	<table><tr><th>Category</th><th>Operation Titles (Display Only)</th><th>Minimum Required by Group Size</th></tr><tr><td>2.1 Member Functions</td><td>User Registration · Profile Management · Health History · Dashboard · PT Session Scheduling · Class Registration</td><td>4+ ops</td></tr><tr><td>2.2 Trainer Functions</td><td>Set Availability · Schedule View · Member Lookup</td><td>2+ ops</td></tr><tr><td>2.3 Administrative Staff Functions</td><td>Room Booking · Equipment Maintenance · Class Management · Billing & Payment</td><td>2+ ops</td></tr><tr><td>Total</td><td></td><td>Group of 1 → 6+ ops; Group of 1 → 8+ ops; Group of 1 → 10+ ops</td></tr></table>	comprehensive. Role separation is mostly correct with occasional permission leakage or missing checks.	unclear or inconsistent.	Little/no validation or role handling.	UI/design with no real functionality.	

User Interface / CLI Flow	**Excellent — Clear, Intuitive, No Major Issues**	**Good — Minor Issues**	**Satisfactory — Noticeable Confusion Points**	**Weak — Hard to Use**	**Poor/Missing**	**Criterion Score**
User Interface / CLI Flow	Interface is easy to navigate and role-specific menus/commands are logically grouped. Actions require minimal steps, feedback messages are meaningful, and no major usability issues affect workflow.	Interface is functional and mostly clear, but menu flow or command naming may be slightly confusing. Minor usability friction present but system remains usable without guidance.	UI/CLI works but lacks clarity in flow. Roles may share similar commands without separation, or user may need trial/error to perform tasks. Labels, prompts, or navigation inconsistent.	Functionality exists, but navigation is non-intuitive. Users struggle to find operations or recover from invalid input. Role access unclear or not separated properly.	No meaningful UI/CLI flow, menus unclear, broken navigation, or system only runs via direct SQL/ORM calls with no interaction layer.	/ 5

Demo Video Presentation	**Excellent — Complete, Clear, Professional**	**Good — Mostly Complete, Minor Gaps**	**Satisfactory — Partial Coverage**	**Weak — Minimal or Unclear Demonstration**	**Missing / Not Acceptable**	**Criterion Score**
Demo Video Presentation	Well-paced walkthrough covering all required elements: ERD, relational mapping, normalization summary, database creation (SQL or ORM), and system functionalities. Code and outputs are clearly visible. All members participate meaningfully.	Presentation covers most required components but one area may be briefly shown or missing detail (e.g., code not very visible or ERD skipped quickly). Minor pacing or clarity issues but still effective.	Several required components not demonstrated or shown only superficially. Example: ERD shown but mapping not explained, or code shown without execution.	The demo is difficult to follow, too short, missing major parts (ERD/code/functions), or unclear screen recording. Limited or no visible code execution. Some or most members do not present.	**The video submission is mandatory. Failure to provide a demo video will result in a deduction of at least 50% of the total project grade, regardless of the quality of other components.** Video exists but is too incomplete, too short, corrupted, or unclear to support evaluation. Key parts (UI flow, ERD, mapping, code, or operations) are missing to the extent that the TA must	/ 5

					grade many parts from source code, receiving no benefit or clarity from the video.	

Bonus	**Excellent – ORM fully integrated**	**Good – ORM fully implemented but not full**	**Moderate – ORM partial/functional but limited**	**Minimal – Attempted but weak**	**None**	**Criterion Score**
ORM Implementation						/ 10

Total Project: YOUR GRADE / 109.99