Theory Examination

Guidelines

This exam is the opportunity to apply concepts that has been taught and solve problems based on lessons learned. The exam is closed-book: you may not use any resources during the test and must be done individually. The essence of all work that you submit in this exam must be your own. If you commit some act that is not reasonable, mentor may impose local sanctions that may include an unsatisfactory or failing grade for work submitted.

Not reasonable

- Giving or showing a solution.
- Looking at another individual's work during the test.
- Searching for or soliciting outright solutions to problem sets online or elsewhere.
- Splitting exam's workload with another individual and combining your work.
- Submitting (after possibly modifying) the work of another individual.
- Viewing another's solution to a problem set's problem and basing your own solution on it.

Reading Period

During examination week, a period of 6 hours prior to the start of final examination is designated as Reading Period. Reading Period is intended to be a time for members to reflect, review, and synthesize what they have learned so far. Mentor will also review the materials for the exam throughout the week.
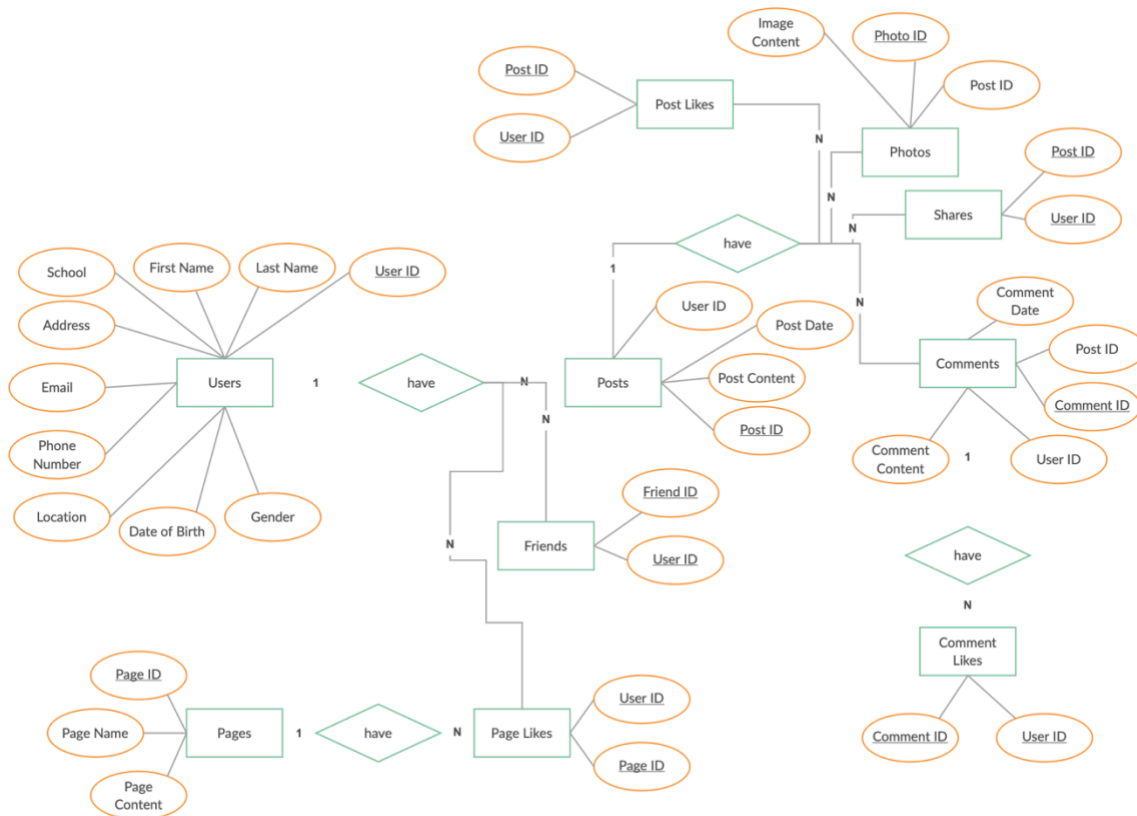
Schedule

Description	Time	Type	Duration
Reading Period	18.00 - 23.59	-	~6 hours
Examination	24.00 - 17.00	Entity Relationship Diagram and Data Definition Language	17 hours

Responsibility

Members who miss an exam will not get a makeup exam and will receive a "*unexcused absence*", which is equivalent to a failing grade. A member may petition for a makeup examination because of illness only if the illness is documented by bootcamp's staff within the reading period before the beginning of the examination.

Study Network Diagram

taken from Spencer King (creately)

Entity Relationship Diagram [50%]

1. From the above diagram, list all of the objects including its attributes! (.pdf)
2. Determine the relation between every object, specify the master and child table! (.pdf)
3. For each object, decide its constraint and specify the reason in detail! (.pdf)
4. Draw the above diagram in "ERD format" which includes the data types, primary and foreign key, and relation between objects. Please choose appropriate tools, we recommend using Visual Paradigm. (.jpeg)

Data Definition Language [50%]

1. Explain what is data integrity and how do we maintain it in SQL Server! (.pdf)
2. Explain the difference and give example for: primary key, foreign key, and composite key! (.pdf)
3. Explain the following terms and give example: BEGIN TRAN, COMMIT, and ROLLBACK! (.pdf)
4. Create all of the tables above according to your answer in the previous section! (.sql)