Final Team Project 201901   A-Team Number: _____

Graded by: _____ Date: _____ Score: _____ / 100

A-Team README - 5 points
1. Team size: X-Team **(4)** or 1 pt. per team member (max of 4 pts.)   **+ 4** ____
2. README includes all information (name, email, x-team) for each team member **+ 1** ____

User Interface - 20 points
1. Displays number of questions in question database   **+ 1** ____
2. Load data from a JSON file   **+ 1** ____
3. Form to add a new question to the database **(2)**, appears in new pane **(1)** **+ 3** ____
4. Save questions in database to file   **+ 1** ____
5. Visible topics list   **+ 2** ____
6. Enter number of questions in quiz   **+ 1** ____
7. Displays question - question **(1)**, image **(1)**, choices **(2)**   **+ 4** ____
8. Displays results - number correct & answered **(1)**, score **(1)**   **+ 2** ____
9. Dialog upon program exit   **+ 1** ____
10. Layout and spacing of UI components **(2)**, aesthetics **(2)**   **+ 4** ____

GUI Functionality - 50 points
1. Displays correct number of questions in database **(2)**, updates after adding questions **(2)** **+ 4** ____
2. Loads data from a JSON file **(5)**, updates topics list **(1)**   **+ 6** ____
3. Form adds a new question to the database **(5)**, updates topics list **(1)** **+ 6** ____
4. Produces correct JSON file   **+ 4** ____
5. Correct topics list **(5)**, in alphabetical order **(1)**   **+ 6** ____
6. Correct number of questions in quiz if input > available questions **(2)**, and otherwise **(2)** **+ 4** ____
7. Displays question number **(1)** and total number of questions in quiz **(1)** **+ 2** ____
8. Displays correct question - question **(1)**, image **(1)**, choices **(2)** **+ 4** ____
9. Correct/Incorrect displayed after submitting each question   **+ 2** ____
10. New question replaces old question (instead of displaying underneath)   **+ 2** ____
11. Displays correct results - correct answers **(2)**, total answered **(2)**, score **(2)** **+ 6** ____
12. Dialog upon program exit offers save to file **(2)** and exit without saving **(2)** **+ 4** ____

Input Validation - 10 points
1. Does not crash/accept invalid input values when user enters number of desired questions **+ 2** ____
2. Does not crash/accept invalid input values in add question form   **+ 4** ____
3. Did not experience other user input validation errors or crashes   **+ 4** ____

Design - 5 points
1. Modular - easy to test, debug, maintain   **+ 3** ____
2. Descriptive field and method names   **+ 2** ____

Style and Commenting - 10 points
1. Code is well organized, documented, and easy to read
   (10 - great, 8 - good, 6 - okay, 3 - poor, 0 - no attempt)   **+ 10** ____

Grader may include additional comments below: