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 - 15 points

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

## 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. Saves data **(2)** in correct JSON format **(4)**          **+ 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 on screen (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 **(3)** and exit without saving **(1)**    **+ 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 - 10 points

1. Modular - easy to read, trace, test, debug, maintain      **+ 5** ____
2. Descriptive field, method, and class names (uses *interface* types to advantage)    **+ 5** ____

## 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:**