Sprint 1:

User Story 1: As Apple, an instructor, I would like to create text based question that has a numerical answer.

Task 1: Create I/O package interfaces (1)

• Create Interfaces for UI and OutputGenerator

Task 2: Create database interfaces (1)

• Create interfaces for DatabaseInserter, DatabaseDriver, DatabaseSelector

Task 3: Create database API interfaces (1)

Task 4: Create action interfaces (1)

- Actions receive input parameters from Driver and perform the appropriate calls against the database via the database API
- Actions have an abstract execute method that will be called by the Driver

Task 5: Implement Driver package (5) (depends on T1, T4)

- Create main class for JWorks
 - Interacts with UI, parser, interpreter
- Create a parser to parse user input strings into readable parameters for the interpreter
- Create an interpreter to interpret user's input and execute the corresponding action

Task 6: Implement I/O package (3) (depends on T1)

- Create UI and OutputGenerator implementing respective interface
- UI prompts user for a choice to create a new question or view a previous one
- OutputGenerator takes a string and outputs it onto the screen

Task 7: Implement database package (4)

- Exchange interfaces for classes
- DatabaseDriver connects to database
- DatabaseDriver adds tables to the database
- DatabaseSelector, given the connection, retrieves problems from the database, either individually or together
- DatabaseInserter inserts a question into the database given the connection and a question and answer
- DatabaseUpdater, given the connection, a new answer or question, and the unique ID of the problem, updates the desired information in the database
- DatabaseDeleter, given the connection and the unique ID of the problem, removes a problem from the database

Task 8: Implement API to store questions into (2) (depends on T2 and T3)

Task 9: Implement Action for saving an inputted question (1) (depends on T3)

• Extends base Action class, implements execute method to call database API and save a problem, given a question and answer

User Story 2: As Apple, an instructor, I would like to be able to view the questions that I have created.

Task 10: Expand API to be able to view all saved questions (3)

Task 11: Implement Action for viewing all saved questions (2)

- Extends base Action class, implements execute method to call database API and retrieve all saved problems
- Outputs list of questions via I/O package's OutputGenerator class