Qn 6

Flutter	Angular
Flutter applications are written in Dart with Flutter engines working in C++.	Uses HTML structure and Javascript to create its applications.
The same source code can be used for creating both android and iOS applications.	Angular mobile applications are platform-specific - the same code cannot be used to build both android and iOS applications.
Flutter uses components like Flutter Engine, Dart platform, Foundation library, and Operating system design specific widgets to construct the applications.	Angular uses components like Data Binding, Type Components, Dependency Injection, and Service Components to build the applications.
As compared to Javascript, Dart is relatively less used by developers since Flutter/Dart is developed at a later stage.	Angular has its roots established and is a globally trusted, well-established open-source framework.

Qn 7

1. Code refactoring helps to keep code clean when lots of new code has been added to it by people in the team. Removing redundant code, long methods, unnecessary loops etc. allows the code to be simpler, cleaner and easier to understand. This in turn allows it to be easier to work with as the development team progresses with the project.
2. Code refactoring also improves the performance of the application. An application that does not have unnecessary code will run faster and smoother. This also leads to a better customer experience.
3. Code refactoring will reduce total costs and save money in the long run. Code that is not regularly refactored will be more prone to damage/issues that may cost more money to fix.
4. Code refactoring also makes it easier to find bugs in the system since refactoring allows us to understand the entire structure of the application better.
5. Code refactoring is needed to keep code updated. When newer versions of libraries/frameworks are released, the program written in the older version may not work/work with some errors. Thus, code refactoring is important to prevent this issue.
6. Code refactoring can improve the system design as frequent reviewing of code allows us to understand the project in a better way and discover better solutions that we may have overlooked.

Qn 8

I would measure a source code's quality based on these 7 traits:

- Reliability
  - The frequency and criticality of software failure
- Maintainability
  - The ease with which changes can be made to satisfy new requirements or to correct deficiencies
- Testability
  - How well the source code supports testing efforts
- Portability
  - The ease with which the software can be used on computer configurations other than its current one
- Reusability
  - The ease with which the current code can be reused in developing other software
- Efficiency
  - The degree with which the software fulfils its purpose without waste of resources
- Correctness
  - The degree to which the software developed adheres to its specified requirements

Qn 9

In my opinion, the 2 most promising front-end/mobile development technologies are Flutter and React. Flutter uses Dart programming language which is similar to Java so it is easy to pick up and use if developers already have knowledge on using Java. Both Flutter and React Native supports Hot-Reload, which allows us to make changes to our code and see the results in real-time. This enables us to be productive and efficient. Both frameworks also allow us to use the same source code to develop iOS and android applications which saves cost and time. As seen on many QnA websites like Stack Overflow, there is already a substantial amount of developers using Flutter and React frameworks although both are considered relatively new technologies.