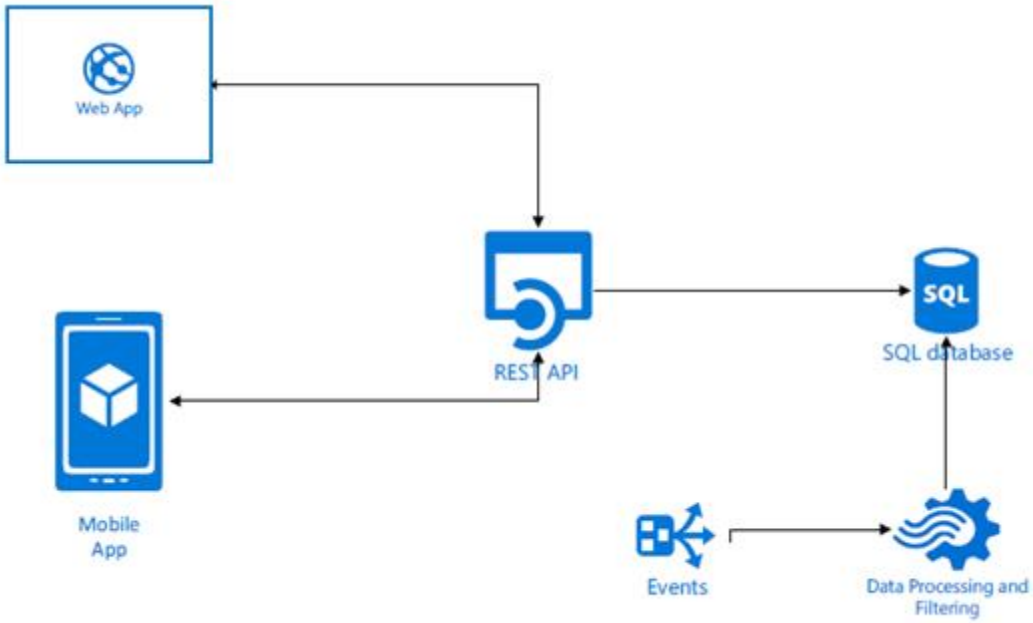
DevOps Challenge:



In the above diagram we have the following system:

1. A web application that is retrieving and sending data to and from a REST API and displaying it to a user.

2. A mobile application that is retrieving and sending data to and from a REST API and displaying it to a user.

3. A SQL database that is populated with data from a continuously running application that is responsible for processing and filtering events that it receives.

4. The REST API retrieves all of the data that it requires from the SQL database.

5. Both the mobile and web applications require user login and are responsible for both displaying and updating information.

Assume you are given the above diagram as a plan before any development begins. Some additional information for this scenario is listed below:

a) Each module/process may require different approaches, or some may not be relevant to the DevOps plan

b) The team will be required to deploy patches/updates every 2 weeks

c) The web app and mobile app are public facing

d) There are no dedicated QAs on the team

Question 1: Outline your approach in terms of what DevOps practices and principles you would implement as the project kicks off.

Now imagine you are entering this project once it is already mature (but with no DevOps having been implemented).

Question 2: What is the first (or most critical) area that you would choose to focus on?

Question 3: How would you monitor and alert on downtime on any of the given aspects of the system?

Feel free to list any other thoughts or observations not covered by the above questions.

NB: The technology used to create the system is not relevant in this situation. The goal of this exercise is to ascertain how you approach ongoing DevOps considerations in a generic system. Feel free to go into as much detail as you like.