1) What are the key steps involved in building an end-to-end web application, from development to

deployment on the cloud?

Ans-

Conceptualizing the product. ...

Project kickoff. ...

Discovery Phase. ...

Wireframes & Designs. ...

Development. ...

Post Launch Support.

2) Explain the difference between traditional web hosting and cloud hosting.

Ans- Web hosting allows individuals and businesses to make their websites accessible worldwide through the Internet (WWW). A business or individual must have their own computer or server for web hosting, however, under Cloud Hosting, websites are hosted on multiple interconnected web servers.

3) How do you choose the right cloud provider for your application deployment, and what factors should you consider?

Ans-

Certifications & Standards.

Technologies & Service Roadmap.

Data Security, Data Governance and Business policies.

Service Dependencies & Partnerships.

Contracts, Commercials & SLAs.

Reliability & Performance.

4) How do you design and build a responsive user interface for your web application, and what are some best practices to follow?

Ans-

Eliminate Friction. ...

Design for Thumbs. ...

Take Advantage of Mobile Devices' Native Hardware. ...

Make Layouts Fluid/Adaptive by Default. ...

Don't Forget About Landscape Orientation. ...

Remember, Typography Can Be Responsive Too. ...

Lazy Load Non-vital Images and Videos. ...

Conditional Loading.

5) How do you integrate the machine learning model with the user interface for the Algerian Forest Fires project(which we discussed in class), and what APIs or libraries can you use for this purpose?

Ans- The experienced forest department can check on 3-4 parameters from their human mind but ML on other hand can handle the numerous parameters whether it can be latitude, longitude, satellite, version, and whatnot, so dealing with this multi-relationship of a parameter that is responsible for the fire in the forest we do need ML for sure.

import datetime as dt

import pandas as pd

import numpy as np

import seaborn as sns

import matplotlib.pyplot as plt

%matplotlib inline

from sklearn.model\_selection import train\_test\_split

from sklearn.metrics import accuracy\_score, classification\_report

from sklearn.ensemble import RandomForestRegressor