

1. Django is the backend framework I would prefer to use

We can develop the web application easily with less code by consuming less time .

It provides inbuilt features like

- Admin interface for managing data .
- Object relational mapper which is an abstract for database which helps us extract data easily without too many sql codes.
- Authentication for identifying users
- caching .

I had used PHP in my previous project , which requires a comparatively high amount of coding with less readily available features . So I prefer developing my knowledge in Django for my next project .

2. React is the frontend framework I would prefer to use

- It's an open source frontend javascript library
- Responsible for the view part of the web application
- It uses DOM (Document object model) . DOM is a programming interface for web documents that represent the page so that programs can change the document structure, style and content .
- It provides small piece of html code as output that is visible to the user .
- It uses JSX which is a combination of javascript and html

3. MySql is the database I would prefer to use

- MySql is easy to install and setup .
- it can handle large amount of data easily .
- It uses indexing options for fast data retrieval .
- It can handle high traffic volumes .
- It is compatible with PHP , Python and java .
- It is an open source software which can be freely used .

4. According to my research , I would prefer using Git

- It provides the developers their own copy of the repository on their local device , which allows offline work .
- It can handle large codebases .
- It uses good data structures and algorithms which supports branching and merging .

5. I would prefer using Google cloud storage

- Mainly it is cost effective . We need to just pay for the storage which we use

- It can store a huge amount (petabytes) of data easily .
  - The data will be encrypted , provides multifactor authentication .
  - It is durable , as the data is stored in multiple geographic locations .
  - We can access data with a single API call from all storage classes  
We can also make use of AWS if we are using the same for deploying the web application.
6. I would prefer using Amazon web services for deploying my web applications .
- AWS is cost effective , we can pay only for the resources we use .
  - It provides all the services like storage , database and networking services .
  - It has a secured infrastructure which uses encryption and multifactor authentication .
  - It has a user friendly interface and tools are easy to use . Especially for students as we don't have a lot of technical expertise
  - It provides fault toleration and keeps the application running even at time of any failures either in hardware or any other issues .

I would use Apache server .

- Apache server is an open source software , which can be freely used.
- It can run on all operating systems (Windows , Linux , MacOS ) .
- It can be customized based on requirements .
- It provides security and protects websites from attacks .
- As it has a large set of users , we have many sources available for seeking help when required.