

eBay Database Project Summary

❖ Project Summary:-

eBay is used for robust online shopping, offering a platform for buying and selling a wide range of products, from electronics and fashion to collectibles and home goods.

❖ Experience and Challenges:-

Experience: - Firstly, working as a team was a great experience by sharing knowledge and ideas we all had. We did start by understanding what eBay needs from the database then we did plan how to organize data such that it is easy to find and use. We did work together to design database structure, deciding which tables to create and how they should connect. We did communicate a lot to make sure that everyone is on the same page and that the database meets eBay's requirements.

Challenges: Creating a unique and realistic database posed challenges. We brainstormed various ideas before settling on one that offered practical solutions. Ensuring data accuracy and minimizing redundancies required constant refinement of our database schema. We encountered issues with cyclic foreign keys, which we resolved through online research. Additionally, managing connection limits taught us valuable lessons in database management.

Real User Inputs: We maintain authentic values in our database, including real product listings, transaction histories, and user interactions, to mirror the eBay experience.

❖ **Efforts and Initiatives:-**

Normalization:- We worked hard to normalize the database to optimize performance and minimize redundancy, ensuring efficient data storage and retrieval.

Documentation:- Detailed documentation was prepared like (ER-Diagram and Relational Schema), outlining the database structure, relationships, and constraints, facilitating understanding and future maintenance.

Testing:- Rigorous testing was conducted to identify and address potential issues with data manipulation and query execution, ensuring smooth system functionality.

❖ **Learnings:-**

Data Integrity:- We deepened our understanding of maintaining data integrity through constraints and relationships, crucial for preserving the reliability of the eBay platform.

User-Centric Approach:- Incorporating real user needs and inputs was prioritized, enhancing the practicality and usability of our database system.

Implementation:- Exploring all the web-development tools to implement our database of eBay in real life but due to other academic commitments and lack of time duration we are not able to implement it completely but we will complete it soon.

➤ In conclusion, the eBay Database project taught us a lot about managing databases, especially for online purchases. It showed us how important it is to find the right balance between making things complex and keeping them easy to use in real life.