**E-Commerce Project – IT E-Commerce Platform**

*Kinshuk Vasisht, M.Sc. Semester 3, R.N.: 19*

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1. URL (GitHub Repository)

<https://github.com/kinshuk-h/EComProject>

2. Project Proposal

* This project aims to implement an E-Commerce website for selling and purchasing of hardware and software components related to devices such as computers, mobiles, tablets, etc.
* The website will provide a common platform for sellers and interested buyers of technical devices and computing devices to connect.
* Sellers can register items they wish to sell over the platform for purchase by customers.
* Customers may search and choose items that they desire based on best features.
* Items offered over the platform include computing devices such as computers, tablets or smartwatches, and/or accessories & spare-parts related to these devices.

3. Features

* Must-have Features:
  + Authentication: Login, register as seller, register as buyer
  + Registration of items for selling (name, category, sub-category, quantity, expected price)
  + Order management: view, confirm orders
  + Cart management: Add, remove, view items
  + Item management: view items with details (name, category, price, rating) (add item to cart) (rate purchased item)
  + Item search and filter: (specific, category/sub-category wise, filters over properties)
* Good-to-have Features:
  + Real-Time Order tracking
  + Recommendations based on product purchase and frequent user purchases
  + Product comparison for best deals / best features
  + Fuzzy Filtering

4. Technical Stack

* Frontend
  + HTML + CSS + JavaScript for dynamic front-end content
* Backend
  + Flask (Python) (for route handling and dispatch)
  + SQLAlchemy (Python) (for interaction with an SQL-based DBMS)
  + socket.io (Python, JS) for real-time updates
* Database
  + MySQL (Relational DBMS, data to be maintained present in structural form, with identifiable relationships)