



# PC Part Builder and Recommender

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# System Description

- Our project is a computer part builder.
- Users can use this tool to build their own computer as well as get recommendations on other parameters.
- The users will be able to pick specific components for their system such as:
  - CPU
  - Motherboard
  - Graphics Card
  - Memory
  - Case
  - Power Supply
  - Storage
  - CPU Cooler



# Implementation Details

## Integrated Development Environment (IDE)

- Pycharm

## Database

- SQLite

## Language

- Python



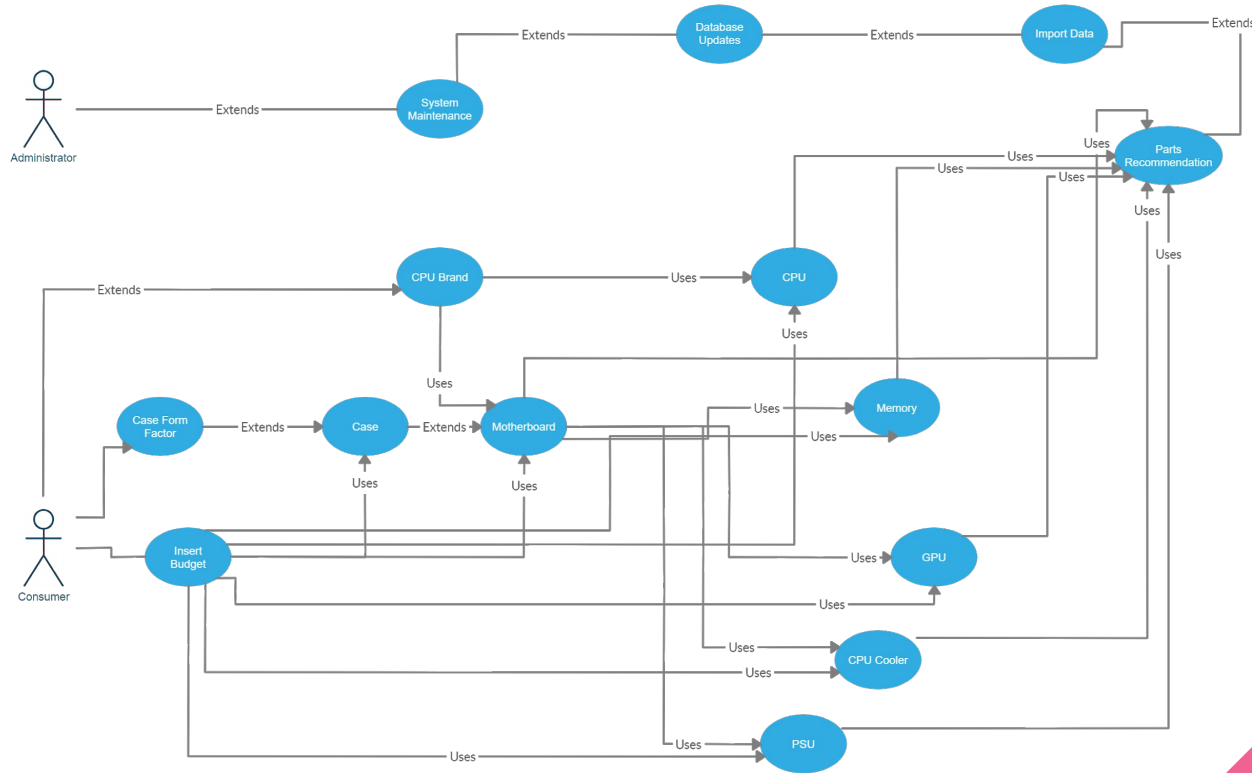
# Most Important Use-Cases

## User Use Cases:

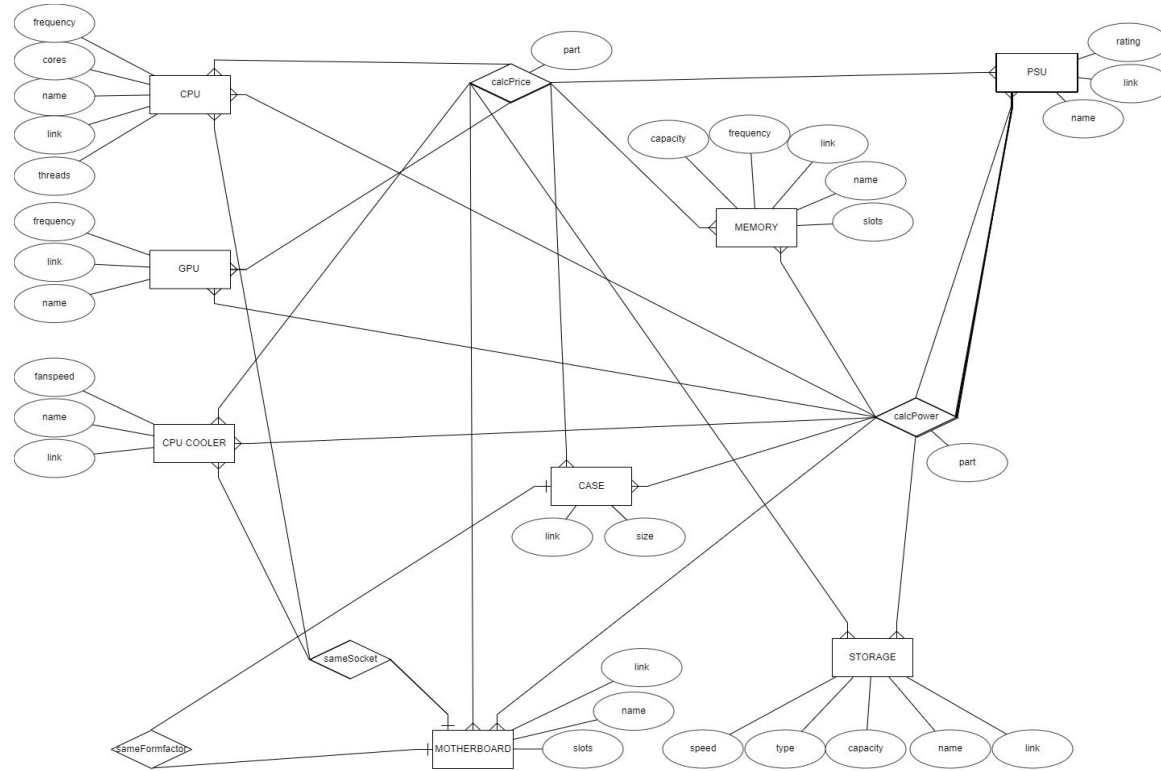
- Manual Input - the user can search through the database with the given prompts
- Recommended Input - the user can receive a recommendation based on budget and other prompts.



# Use Case Diagram



# E/R Diagram



# Relational Schema

CPU: cpu\_name, cpu\_cores, cpu\_threads,  
cpu\_frequency, cpu\_socket, cpu\_power, cpu\_price

PSU: psu\_name, psu\_power, psu\_rating, psu\_price

GPU: gpu\_name, gpu\_frequency, gpu\_power,  
gpu\_price

CASE: pccase\_name, pccase\_formfactor,  
pccase\_price

Motherboard: mobo\_name, mobo\_formfactor,  
mobo\_socket, mobo\_slots, mobo\_price

Storage: stor\_name, stor\_capacity, stor\_speed,  
stor\_type, stor\_price

CPU Cooler: cool\_name, cool\_type, cool\_price

MEMORY: mem\_name, mem\_capacity,  
mem\_frequency, mem\_slots, mem\_price



# Demo Time

<https://github.com/teknicallyadev/CSE-111>

