

Electronic Part Tracker

Problem Statement

A system for tracking electronic parts of the COE department, and managing part borrowing. It should allow its users to check the availability of a given part and to borrow it. A part is available if the department has it and it is not checked out (borrowed).

Outcome

An operational system with sample data of some parts showcasing available and borrowed parts, and how to borrow and return parts.

Requirements

- Add new parts and their quantities. Similar but non-identical parts should be distinguishable. Include part photos.
- Flexible categorization of parts.
- Allow authorized users to request to borrow parts. Requests are approved by the part owner (has the part physically).
- Track individual parts to show whether a part is available or borrowed.
- Filter parts by category, borrower, availability, etc.
- Configurable privileges. Examples (can be changed by the admin):
 - Only faculty members can check out parts. Students need a faculty member to borrow parts on their behalf.
 - Only a system admin can change the categories.
- Deployment of the system in a way accessible to all intended users.

Advisor

Dr. Ahmad Khayyat

Team

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Timetable:

Task ID	Task Name/Description	Owner	Weeks													
			3	4	5	6	7	8	9	10	11	12	13	14	15	
1.0	<i>Collecting and analyzing the req.</i>	Khiary	X													
2.0	<i>Database Design</i>	Wael		X	X	X	X	X	X							
2.1	Conceptual design	Mahdi		X	X											
2.1.1	Entity Relation diagram (ER)	Mahdi		X	X											
2.2	Logical design	Wael			X	X										
2.2.1	Normalization	Wael			X	X										
2.3	Physical design	Khiary					X	X	X							
2.3.1	Create tables	Khiary					X	X	X							
2.3.2	Prepare SQL queries	Mahdi					X	X	X							
3.0	<i>Develop a EPT program</i>	Khiary							X	X	X	X				
3.1	Build a program	Wael							X							
3.2	Integrate program with DB	Mahdi								X	X	X				
3.3	Design program Interface	Khiary										X				
4.0	<i>Testing the system</i>	Mahdi											X			
5.0	<i>Improve the system</i>	Wael											X	X		