SE 216 – SOFTWARE PROJECT MANAGEMENT
REQUIREMENTS DOCUMENT

PROJECT NAME: SHARPFRİDGE

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REQ. #	FUNCTIONAL REQUIREMENTS
1.	The system shall monitor temperature and humidity levels using sensors.
2.	he system shall notify the user in real-time via the user interface or mobile application of any deviations from optimal storage conditions.
3.	Alerts shall include specific information about the affected compartment and the nature of the deviation.
4.	The system shall adjust cooling and humidity levels based on the type of food stored and environmental conditions.
5.	Cooling and humidity adjustments shall be made automatically by the system without user intervention.
6.	The system shall provide a user-friendly interface accessible via a control panel on the refrigerator or through a mobile application.
7.	The interface shall allow users to monitor temperature, humidity, and storage status of food items.
8.	Users shall be able to easily adjust settings for different compartments and food types.

9.	The system shall undergo rigorous testing to ensure reliability and effectiveness in maintaining optimal storage conditions.
10.	Testing shall include simulation of various environmental conditions and scenarios to validate system responses.
11.	Validation shall involve comparison of system performance with established standards for food storage
12.	The system shall support multiple users accessing the interface simultaneously.
13.	Each user shall have their own login credentials and personalized settings.
14.	The system shall calculate the storage period for each food item based on the production and consumption date entered by the user
15.	Storage period determination shall take into account factors such as food type, best before date, and environmental conditions.
16.	The system shall allow users to designate different compartments for storing various types of food.
17.	Each compartment shall have adjustable temperature and humidity settings.
REQ. #	**NON-FUNCTIONAL REQUIREMENTS**
1.	The system shall respond to deviations from optimal storage conditions within seconds.

2.	It shall maintain consistent temperature and humidity levels within specified tolerances.
3.	The system shall operate reliably under varying environmental conditions.
4.	It shall have fail-safe mechanisms to prevent spoilage in case of sensor failure or power outage
5.	User data, including login credentials and food storage information, shall be encrypted and securely stored.
6.	Access to sensitive features such as temperature adjustment shall be restricted to authorized users.
7.	The system architecture shall support scalability to accommodate additional sensors or features in future upgrades.
8.	The user interface shall be intuitive and easy to navigate, requiring minimal training for users.
9.	Instructions and help resources shall be available within the interface for user assistance.
10.	The system shall be compatible with a wide range of food storage containers and packaging materials.
11.	It shall also be compatible with commonly used mobile devices and operating systems for remote monitoring and control.

12.	The system should recalculate humidity and temparatures for each storage when there is a power outage