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CS 5001
10/6/24

Project Milestones, Timeline, and Effort Matrix

Milestones List:

Milestones	Description	Deliverables
Database Framework	Create the foundational database that will store all of our objects, should be as modular and general as possible	A simple functional database that can handle IO
Algorithm Testing	Demonstrate working database traversal algorithms	Execution runtime, performance evaluation, accuracy/precision
Frontend Application	A frontend should be created to showcase how the database can be accessed and viewed by a user.	Showcase a simple frontend interface (likely web based)
IO Implementation	Create various methods of adding and removing items from the database. These can utilize word processing, computer vision, and API calls.	Showcase some different methods of adding/removing items from the data base (API, receipt, scan, etc)
API	Build a functional API so the program can be easily accessed through a multitude of ways (web, mobile, desktop)	Show a list of API commands and their purpose

Timeline:

Tasks	Estimated Start	Estimated Completion
Design a database to store user application information	10/14/24	11/11/24
Research different methods for inputting information, such as with a camera and a document or QR code	10/28/24	2/17/25
Research machine learning to deal with user input and visual data input	3/3/25	4/28/25
Research algorithms to input and retrieve data from the database	11/4/24	11/25/24
Research developing for different platforms, specifically Windows and Android	1/13/25	3/3/25
Document programming and testing	10/14/24	5/1/25
Iteratively design, test, and refine the application	10/14/24	5/1/25
Use GitHub to keep track of iterations and project updates	10/6/24	5/1/25
Develop a backend API for communication between the frontend and database	10/28/24	11/11/24
Provide testing for API	11/11/24	12/2/24
Develop a frontend design and user interface	11/11/24	12/2/24
Provide testing for UI	12/2/24	2/3/25

Effort Matrix:

Assumes 100 hours of work across 2 semesters

Tasks	Primary Member Assigned	Rey Hours (100)	Justin Hours (100)
Design a database to store user application information	Rey	20	
Research different methods for inputting information, such as with a camera and a document or QR code	Justin		25
Research machine learning to deal with user input and visual data input	Rey	10	
Research algorithms to input and retrieve data from the database	Rey	25	5
Research developing for different platforms, specifically Windows and Android	Justin		10
Document programming and testing	Justin	7	7
Iteratively design, test, and refine the application	Rey	10	10
Use GitHub to keep track of iterations and project updates	Justin	3	3
Develop a backend API for communication between the frontend and database	Rey	20	
Provide testing for API	Rey	5	
Develop a frontend design and user interface	Justin		25
Provide testing for UI	Justin		5