**Department of Computer Science**

**(2024F) COMP-5313-FA**

**Artificial Intelligence**

**Contest Roles Breakdown**

ChatGPT vs AutoGPT vs AgentGPT

**Submitted To: Prof. Dr. Sabah Mohammed**

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# **Comparison of ChatGPT, AutoGPT, and AgentGPT**

## **Group Division**

### **Mindmap Driver (Leader)**

* **Members: (1)**
* **Responsibilities:**
  + Plot a mind map for the possible paths of the research.
  + Oversee the visualization of all areas of comparison.

### **2**. **Librarian (Researcher)**

* **Members: (1-2)**
* **Responsibilities:**
  + Gather and organize a minimum of 20 relevant papers and resources.
  + Provide the best and most reliable sources to support the research findings.

### **3**. **Prototyper (Coder)**

* **Members: (1-2)**
* **Responsibilities:**
  + Experiment in Python with various algorithms.
  + Develop sample code snippets to demonstrate programming capabilities and output quality.

### **4**. **Designer**

* **Members: (1-2)**
* **Responsibilities:**
  + Create block diagrams and figures for the presentation.
  + Design visuals that effectively communicate key comparisons.

### **5. Editor**

* **Members: (1-2)**
* **Responsibilities:**
  + Edit and revise the executive summary document.
  + Ensure clarity, coherence, and professionalism in the PPT presentation slides.

### **6**. **Presenters**

* **Members: (2-4)**
* **Responsibilities:**
  + Prepare to present the findings in a clear and engaging manner.
  + Focus on delivering key insights, including:
    - Speed and performance.
    - Debugging and error handling.
    - Output quality and comprehensiveness.

### **7**. **Integrator**

* **Members: (1)**
* **Responsibilities:**
  + Combine all parts of the project into a cohesive whole.
  + Ensure consistency in style and format across documents and presentations.

## **Areas of Comparison**

### **Capabilities in Programming:**

* General programming capabilities in Python.
* Specific strengths in different fields of programming.

1. **Differences in Functionality:**

* Overall differences in capabilities and use cases.

1. **Strengths and Weaknesses:**

* Analysis of each tool’s strengths and weaknesses.

### **Output Quality:**

* Ability to generate meaningful Jupyter notebooks (ipynb).
* Quality of generated code (commented, efficient, etc.).

1. **Debugging and Error Handling:**

* Capabilities for debugging and resolving errors.

1. **Speed and Performance:**

* Response times and processing speed.

1. **Access to Information:**

* Access to the internet and up-to-date information.
* Amount of training data utilized.

1. **User Intent Understanding:**

* Ability to understand and respond accurately to user prompts.

1. **Pricing Models:**

* Cost of using each tool and any associated pricing plans.

1. **Comprehensiveness:**

* Overall comprehensiveness of the solution provided.

### **Community and Support:**

* Availability of community support and documentation.