**OOP and Design Patterns (CSCI 375)**

**Student Showcase (Final Project) Rubric**

1. Project Title:
2. Team Members:
3. Evaluator:

**Grading Rubric:**

**Instructions:**

1. There are 9 technical requirements to grade the project and the team presentation.
2. For each requirement, use 0 - 5 scale in the Score column (0 - F, 1 - Needs improvement, 2 - Poor, 3 - Fair, 4 – Good, 5 - Excellent)
3. Use the *Notes* section to jot down any observations that may help in grading and justification.

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| **Team and Technical Project Requirement** | **Score** |
| 1. **Use of fundamental OOD concepts**, e.g.: Inheritance, Abstraction, Attributes, Getters, Setters, Methods, Modularity, Overloading, etc.   Notes: | /5 |
| 1. **Use of at least 3 Design Patterns** -- presentation clearly stated and briefly explained design patterns use. Common design patterns are Iterator, Decorator, Observer, Strategy, Command, State, Singleton, Adapter, Façade, Flyweight, Abstract Factory, Composite, Template, MVC, etc.   Notes: | /5 |
| 1. **Testing for correctness** – automatically generates test data using hypothesis, usage of mocking/patching, provides code coverage and Python type check (mypy) reports, etc.   Notes: | /5 |
| 1. **Documentation** – clear, easy to follow documentation, UML diagrams are complete, and notations are correct; explanation of objects interaction is clear and complete.   Notes: | /5 |
| 1. **Software management** – good usage of management, communication and tracking tools e.g., Gant chart, Kanban board, GitHub Project, Clickup, Discord, Slack, etc.   Notes: | /5 |
| 1. **Teamwork** – clear division of labor and progress tracking; helping each other, etc.   Notes: | /5 |
| 1. **Project requirements and execution** -- clearly stated functional and technical requirements, project adequately challenging for sophomore-junior students; project demo was clear and concise, etc.   Notes: | /5 |
| 1. **Team presentation** -- all members participated in presentation, used the visual and oral presentation techniques and tools to engage audience, etc.   Notes: | /5 |
| 1. Use 4+1 Views to explain the design to the audience.   Notes: | /5 |
| 1. **BONUS: Above and beyond** – Team went beyond the above list e.g., great User Interface, use of Database, real-world application, client delight and interaction, CI/CD, deployment, etc.   Notes: | /10 |
| **Total Score**  Note: Max score can be 50 due to 10 BONUS points. | /45 |