

**THINKING – Program Analysis & Design**

<b>Level 0 (&lt;50%)</b>	<b>Level 1 (50 – 59%)</b>	<b>Level 2 (60 – 69%)</b>	<b>Level 3 (70 – 79%)</b>	<b>Level 4 (80 – 100%)</b>
Program design proposal not provided.	Program design proposal is minimal.	Program design proposal has some missing parts/steps	Program design proposal is clear and complete (includes all major features/steps).	Program design proposal is clear, complete, concise, comprehensive, and modular.
No programming concepts outlined or explained.	Few programming concepts outlined and explained.	Some programming concepts outlined and explained.	Most programming concepts outlined and explained well.	All programming concepts outlined and explained thoroughly.
Implementation steps not followed.	Implementation steps minimally followed. Little to no analysis & problem-solving skills shown.	Some implementation steps were followed. Some analysis & problem-solving skills shown.	Most implementation steps were followed. Considerable analysis & problem-solving skills shown.	All implementation steps show excellent analysis & problem-solving skills.

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**APPLICATION – Program Implementation & Functionality, Code Structure & Design**

<b>Level 0 (&lt;50%)</b>	<b>Level 1 (50 – 59%)</b>	<b>Level 2 (60 – 69%)</b>	<b>Level 3 (70 – 79%)</b>	<b>Level 4 (80 – 100%)</b>
The program is not provided.	Incomplete. Program is missing some major features and/or has significant errors.	Somewhat complete. Program is missing some minor features and/or has some minor errors.	Mostly complete. Program has some minor errors and/or omissions.	Complete and passes all tests with no errors.
	Demonstrates few required programming skills & concepts.	Demonstrates some required programming concepts & skills.	Demonstrates most required programming concepts & skills.	Demonstrates exceptional understanding of all programming concepts & skills. Exceeds expectations.

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**COMMUNICATION – Code Readability, Organization, Documentation & Maintenance**

<b>Level 0 (&lt;50%)</b>	<b>Level 1 (50 – 59%)</b>	<b>Level 2 (60 – 69%)</b>	<b>Level 3 (70 – 79%)</b>	<b>Level 4 (80 – 100%)</b>
No formatting or comments provided. Methods/variables not used or naming incorrect, not descriptive. Documentation is not provided.	Minimal formatting and comments provided. Method/variable naming incorrect, not descriptive. Documentation is minimal/incomplete. Many spelling and/or grammar errors interfere with understanding.	Some formatting and comments provided. Method/variable naming somewhat correct, descriptive. Documentation is missing some parts. Some spelling and/or grammar errors interfere with understanding.	Good formatting and comments provided. Method/variable naming mostly correct, descriptive. Documentation is mostly complete. Minor spelling and/or grammar errors do not interfere with understanding.	Excellent formatting and comments provided. Method/variable naming meaningful and descriptive. Documentation is exceptional and detailed. No spelling or grammar errors.

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