Item	Possible Points	Earned Points	Notes
Program design for Project • User input is validated as specified • Displays appropriate error messages for invalid data • Loan amount and interest rate are decimal values • Years is an integer value • There is a separate method to validate each type of data (one to validate the decimal data, one to validate the integer data, and one to validate the string data) • The monthly payment is calculated correctly • The results are formatted correctly	**5**	4	Your program does not validate that the user entered a y or an n for the choice to continue.
Design Diagram: • A correct class diagram is provided for all classes (not needed for the main program class and not required for this project) • Design documentation reflects actual logic of code • All methods are documented • No diagram is larger than one page (8 ½ by 11 inches with ½ inch margins on all sides) • If using flowcharts to diagram the logic: o Each flowchart begins and ends with a terminator symbol Note: the main method beginning terminator contains the word `main()`. The main method ending terminator contains the word `return`. Because you do not write the code that calls the main method, you will not have any flowcharts where the beginning terminator contains the word `START` and the ending terminator contains the word `END`. o The appropriate symbol is used o Only one task per process symbol (the rectangle); each variable declaration should be in its own symbol; show the entire formula for calculations o Every symbol (except a terminator) has at least one flowline leading to it and one and only one flowline leading from it. • If using structured pseudocode to diagram the logic: o The pseudocode is appropriately indented o Each variable declaration is on its own line o The entire formula is shown for calculations o Selection and iteration blocks have a clear beginning and ending • If using Warnier Diagrams to diagram the logic: o Braces are appropriately labeled o Each variable declaration is on its own line o The entire formula is shown for calculations	**5**	2	Your diagram for main does not show the appropriate loop. Your diagrams for the methods do not show the loops appropriately. See the corrected diagram for `main()` and for `getDouble()`.

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Following course standards:
• Code standards:
  ○ Code restricted to 80 columns
  ○ Follows naming conventions for classes, variables, methods, and constants
  ○ Appropriate comment block at top of program file (may use javadoc conventions)
  ○ Methods appropriately commented (may use javadoc conventions)
  ○ Variables have meaningful names
  ○ Braces align correctly
  ○ Control statements formatted correctly
• All non-code files contain your name, the course code (CITP 190), and the project number at the top of the file.
• All design diagrams are in one file.
• All files are in standard 8 ½ by 11 inch format with at least ½ inch margins on all sides of the page.
	5	5	Very good comments before each method!

Proof • Includes formulas • Shows all test data	**3**	3	Okay
Screen captures	**2**	2	Okay
Penalties: • Incorrect calculations • Output is not presented as shown (including spelling and spacing) • Code does not follow the standards • Not all test data was used • Reflects material outside what has been covered through Chapter 5	**-20**		
Total	**20**	**16.0**	