***AutoCAD Final Project: The Dream House***

***PREMISE***: An unknown aunt from a distant corner of your family, Aunt Babby, has recently passed away. A lawyer delivers you a court document, stating that Aunt Babby has left you the sum of 5.6 million dollars and a 16 acre parcel of land in the mountains outside of Steamboat Springs, Colorado. The property is nicely wooded, with rock outcroppings and a small stream running through the grounds. There is a nice, level area of ground 150 feet by 200 feet that would be perfect for building a house.

Because you love AutoCAD so much, you have decided that you will not only build your Dream House on this location, but also DESIGN the house, using your architectural drawing skills.

***THE PROJECT***: As your final project in AutoCAD, you will be creating your Dream House. This project will be worth a total of 250 points. To begin this project, you must first complete the four problems in [***AutoCAD Assignment 11: Architectural Drawing***](http://www.highlandtechnology.org/files/assignment_sheets/technology/autoCAD_11_architectural_drawing.htm), worth 50 points.

***SOME INSPIRATION:*** I have put together a page of house plans for you to check out. I know this doesn't sound very interesting, but these are very nice houses. Take a look at them. Before you think to yourself, "There is no way I can do something like that!", realize that those plans were created by professional architects and the designing of those homes likely costs thousands and thousands of dollars.

[***A Page of Dream Homes for Inspiration***](http://www.highlandtechnology.org/files/technology/autoCAD/dream_house/dream_house_samples.htm)

***RULES FOR YOUR PROJECT:***

* Your house will contain NO FEWER than 11 rooms, as follows:
	+ TWO GUEST BEDROOMS, with closets in each room.
	+ ONE MASTER BEDROOM (Double size of the other bedrooms, with a bathroom, and extra large closet.)
	+ KITCHEN, with sinks, counters, Refrigerators, Dishwasher, etc.
	+ TWO Bathrooms, each with a toilet and tub/shower.
	+ FAMILY ROOM, with large windows for seeing the property, plus a fireplace.
	+ DINING ROOM, with table and 10 chairs.
	+ GAME ROOM, furnished with some of the following, according to your tastes: pool table, poker table, wet bar, dart boards, dance floor, etc.
	+ HOME THEATER, with room for couch seating for at least 10 guests.
	+ AT LEAST ONE EXTRA ROOM of your choice, this can be anything from an indoor pool to a basketball court to a bowling alley.
	+ You can add more rooms if you wish, but you MUST include at least these 11.
* Before you begin drawing your house in AutoCAD, you MUST complete a pencil drawing of the layout of your house. Remember, the plot of land that you have that is level enough for building is only 150 feet by 200 feet, take this into account when drawing your house. This rough draft will be worth 50 points towards your final project grade. Include all elements listed above in your rough draft, as well as basic dimensions. REFER to the sample homes for some ideas as to the proper size of the rooms in your layout.
* When you start drawing your house, make sure you use Wizards to create a page that is at most 200’ x 150’ on which to draw your house.
	+ CREATE THREE NEW LAYERS for your drawing:
		- HOUSE LAYER (BLACK): includes all of the walls, doors, sinks, appliances and windows of the house.
		- TEXT LAYER (BLUE): includes all of the Room labels, explanatory text and dimension lines.
		- FURNISHINGS LAYER (GREEN): includes all of the blocks used for representing furniture and other installations.
	+ All walls (double lines) will be 6” thick on your drawing.
	+ All rooms will have proper DOORS and WINDOWS, as outlined in [***"Creating and Inserting BLOCKS in AutoCAD."***](http://www.highlandtechnology.org/files/Camtasia_Tutorials/Technology_1_Tutorials/autocad_using_blocks/autocad_using_blocks.html). The only room that would not need at least one window is the HOME THEATER room.
	+ Permanent Fixtures in your house will be put on the HOUSE layer in black. This includes all the items that would not be taken when you move, such as:
		- Toilets and Showers and Bathtubs in the Bathroom
		- Sinks and Counters in the Kitchen
		- The Fireplace in the Living Room and in any other rooms in which you place them.
	+ Each room will need to have the necessary furnishings included on the FURNISHINGS layer in GREEN. These items will be drawn to scale and inserted as BLOCKS, as outlined in [***"Creating and Inserting BLOCKS in AutoCAD."***](http://www.highlandtechnology.org/files/Camtasia_Tutorials/Technology_1_Tutorials/autocad_using_blocks/autocad_using_blocks.html) . You must include, but not be limited to:
		- Beds in each Bedroom
		- Chairs and Couches in Living Rooms and Home Theaters.
		- Tables and Chairs in Dining Rooms
		- Appropriate Furnishings in the Game Room: Pool Tables, Bowling lanes, Dart Boards, etc.
	+ All rooms will be properly labeled: “LIVING ROOM”, “GAME ROOM”, etc. in readable text. In addition, room labels will include room dimensions. This text will be placed on the TEXT LAYER in BLUE.
	+ You MUST include AT LEAST the outside dimensions of your house on your BLUE TEXT LAYER. You do not need to dimension each room, that will be accomplished with the room labelling.
	+ You may find that you cannot fit all of your rooms as you would like them on a single level home. If this is the case, you can create a TWO STORY (or more) house. If you do, be sure to include STAIRWAYS from one level to the next. Each LEVEL will need to be created on a separate FILE.

***THE TITLE BLOCK***: When you have completed your project, please draw a large RECTANGLE in BLACK around your house drawing. In the lower RIGHT corner, please place a TITLE BLOCK that looks like this:



***PROJECT SUBMISSION:*** Turn in your pencil rough draft with your name on it when completed. Save your “lastname\_final\_project” file and the FOUR files from [***AutoCAD Assignment 11***](http://www.highlandtechnology.org/files/assignment_sheets/technology/autoCAD_11_architectural_drawing.htm) into a folder called “lastname\_final\_project” and copy that folder into my DROPBOX when you are done.

***GRADING:*** This project will be graded on the quality and effort of the work put into each of the following categories:

* [AUTOCAD ASSIGNMENT 11: ARCHITECTURAL DRAWING](http://www.highlandtechnology.org/files/assignment_sheets/technology/autoCAD_11_architectural_drawing.htm) (50 Points)- Four Problems, 12.5 points for each correctly completed problem for a total of 50 points.
* ROUGH DRAFT (50 Points): Well thought out drawing, includes all major dimensions and all 11 required rooms.
* STRUCTURE (100 Points): Properly executed floor plan, with double lined walls, doors, windows, etc., executed on a HOUSE LAYER in black.
* TEXT and FURNISHINGS (50 Points): All rooms properly labeled and dimensioned on a TEXT LAYER in GREEN. Furnishings included for EACH ROOM on a FURNISHINGS LAYER in BLUE. Explanatory text when needed.
* The RUBRIC for this project is [here](http://www.highlandtechnology.org/files/technology/autoCAD/AutoCAD_Final_Project_Grading_Sheet.docx), if you wish to see it and plan accordingly!

***DUE DATE:*** This project MUST BE COMPLETED BY

***FRIDAY, NOVEMBER 13TH***

FOR ALL CLASSES! If you cannot finish using class time, you must come in during lunch, after school, etc. to complete it. We move on to Fireworks Graphic Design on November 16th!