**Your project Must include**:

**A Powerpoint Summary:**

     Cover page - Topic, Date, Authors.

     Summary page: A narrative about your project.

     A description of each of your worksheets (work sheet name and a description)

      Appendix: Stating your formulas and where you used the tools listed below (see the Excel Workbook section)

      A link to the Excel workbook.

**An Excel Workbook:**

* A tab with documentation: Topic, Date, Authors. Narrative about your project including a description of each of your worksheets.
* A tab – Appendix: Stating your formulas and where you used the tools listed below.
* Dates and some date logic
* Multiple Work sheets
* Basic functions including Counts, Sum, Average.
* At least 1 of the Advanced Finance Functions touching on Present Value or Amortization or Depreciation.
* At least one column where Flash Fill is used.
* In your data sheets, you will make use of formulas with Relative anchoring (no anchoring with $ sign), Absolute anchoring (anchoring both row and columns with $) and Mixed Reference anchoring (anchoring row or column but not both).
* Conditional logic: =IF function
* VLOOKUP or HLOOKUP for reference
* Pivot Tables for Summaries
* Filters
* Graphs
* A tab with at least one, preferably more, summaries suitable for printing:
  + Titles
  + Header / Footer
  + Print Areas defined.
  + One or more summary tables
  + One or more Graphs

**Optional, but you would demonstrate mastery if you would also include some of the following:**

* + Forecasting
  + WHAT IF analysis.
  + Conditional Formatting
  + Nested IF
  + COUNTIF
  + SUMIF
  + AVERAGEIF
  + IFERROR
  + A table where Multiple Sorts are required, or at least make it easier to read.
  + Random numbers
  + PIVOT TABLE SLICERS
  + GOAL SEEK
  + Hyperlinks
  + Security on Spreadsheets

A short list of some possible project ideas.  You can choose anything you like from sports, the arts, pop culture.  These are just  some ideas to get you thinking.

**Accounting / Finance**

Small company: Income statement  / Forecasting the next 5 year with assumptions about growth and interest rates.

Property Manager: You are managing a set of real-estate properties.  Each property required an initial investment, each may have a level of debt associated with it.  Each has various kinds of on-going costs: maintenance, real estate tax, insurance, utilities. Each have a depreciation schedule. Each have tenants – Are they all equally likely to honor their contracts? What happens to overall profitability if one or more stop paying?  What is your profit now? You are thinking of selling: What is the NPV of your property? Forecast future revenues making assumptions about rents / defaults / interest rates...

Call Center Management.  Make up data, how many operators do you need on hand. Are there specialties among operators?  Important to consider date logic - holidays - Forecast need given assumptions about growth.

Inventory Management.  Make up data for how often – mean, standard deviation – things leave the shelf.  You are running the warehouse. Develop rules for re-ordering – Balancing costs of carrying extra inventory vs costs of not having items on hand if ordered. What special provisions do you make for holiday buying season?

**Marketing / Advertising**

Analysis of demographics and purchasing patterns of your customers. (what to they buy? How often? What do you know about them? (names? Addresses? How / When they were acquired, demographic characteristics). Who are your target clients? How do you find more?  (I have census data you can use!)

FORM YOUR GROUPS BY FEBRUARY 16:  2 - 6 People in a Group.

SEND ME A TOPIC (you can change it later) by MARCH 2.

SEND ME A ROUGH OUTLINE OF YOUR PRESENTATION WITH SOME DETAILS BY MARCH 23.