Advanced Excel

(in 2 Hours)

Hour 1: Foundations of Advanced Functions

1. Minute 0-15: Explore Lookup Functions

- o Learn **VLOOKUP** and **HLOOKUP** for searching within tables.
- o Learn **LOOKUP** for data from tables.
- o Understand the basics of **INDEX** and **MATCH** as alternatives.
- o Practice examples to see how these functions interact.

2. Minute 16-30: Master Conditional Functions

- o **ROUND, ROUNDUP, ROUNDDOWN** Ensure all calculations are rounded appropriately to avoid long decimal results.
- o Work with **SUMIF**, **COUNTIF**, and **ERROR** for conditional base logic.
- o Work with **IF**, **IFS**, and **IFERROR** for conditional logic.
- o Work with **AND, OR**, and **NOT** for conditional logic.
- o Discover how these functions enhance decision-making in formulas.

3. Minute 31-45: Dive Into Text Functions

- o Use **TEXT**, **LEFT**, **RIGHT**, and **MID** for text manipulation.
- Get familiar with combining text using CONCATENATE, CONCAT or TEXTJOIN
- o Learn **TRIM**, **SEARCH** and **CLEAN** to tidy up messy text data.
- o Learn **PROPER**, **UPPER** and **LOWER** to tidy up messy text data.

Hour 2: Data Analysis and Automation

4. Minute 46-60: Analyse Data with Pivot Tables

- o Create a Pivot Table and understand its layout.
- o Practice grouping, filtering, and calculating summaries within Pivot Tables.
- Learn about Pivot Charts for visualization.

5. Minute 61-75: Master Data Validation and Protection

- o Set up **Data Validation** for user entry restrictions.
- Dropdowns LIST and VALUES Set up dropdowns for frequencies data, or selection information.
- Learn to secure your sheets using Protect Sheet and workbook options.

6. Minute 76-90: Loan Calculations

- In a loan sheet, there are several base functions in Excel that you can use to manage calculations, track payments, and analyze loan data. Here are some essential functions:
- **PMT** (**Payment Function**) Use this to calculate the monthly payment for a loan based on constant interest rates and constant payments.
- o **IPMT (Interest Payment)** Calculate the interest portion of a specific payment in a loan.
- o **PPMT** (**Principal Payment**) Find the principal amount of a specific payment in a loan.
- FV (Future Value) Calculate the future value of an investment or loan after all payments are made.

- o **RATE** (**Interest Rate**) Determine the interest rate required to pay off a loan or achieve a target investment return.
- o **NPER** (**Number of Periods**) Calculate the total number of payments needed to pay off a loan.

7. Minute 91-120: Practice and Recap

- o Consolidate learnings by solving real-life scenarios.
- Work on combining multiple functions for complex tasks.
- o Experiment with data sets to apply all your new skills.