**Introduction:**

Lend An Ear is an 8 week-long activity where I will be helping Junaid Naik to learn Advanced concepts in Microsoft Excel. Junaid is pursuing master’s in management of Information Systems from University of Texas at Arlington. I came to know about Junaid through a mutual contact and his need to learn more about advance Excel. He aspires to become a data analyst/ data scientist after graduation. A data analyst spends significant amount of time making reports and spread sheets in excel for business stake holder. These reports need to be precise and accurate as the higher management makes critical business decision based on these reports. It takes a savvy computer user to take advantage of everything Excel has to offer to provide the best results for their company and for themselves, as stronger Excel skills can open the door to promotion and leadership opportunities. As I have knowledge of advance Excel concepts through my professional experience. I will be helping Junaid to the best of my abilities to learn Excel.

Below is the schedule giving the detailed plan for the next 8 weeks. I will be giving out homework assignments every alternate week to assess the growth in knowledge.

**Trainer:** Sandeep Satyanarayan Yadav

**Trainee:** Junaid Imtiaz Naik

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| --- | --- | --- | --- |
| **WEEK** | **TOPIC** | **DATE** | **HOMEWORK** |
| Week 1 | Excel Basics | 02/12/2022 |  |
| Week 2 | Conditional formatting, VLOOKUP, Pivot Table. | 02/19/2022 | Homework 1 |
| Week 3 | Macro recording and VBA procedures | 02/26/2022 | Assessing Homework 1 |
| Week 4 | Debugging in VBA | 03/05/2022 | Homework 2 |
| Week 5 | User Defined VBA functions | 03/12/2022 | Assessing Homework 2 |
| Week 6 | Data exchange between excel sheet and VBA | 03/19/2022 | Homework 3 |
| Week 7 | Programming structures in VBA. | 03/26/2022 | Assessing Homework 3 |
| Week 8 | Mini project submission | 04/10/2022 |  |

Hello Everyone,

Hope everyone is doing good.

I have chosen to assist a student in learning basics of excel and VBA.

We met on Saturday for a 2-hour session and went through the basics of excel, details listed below:

* How to navigate around excel worksheet, using the shortcut key combination.
* Common tools that are used on regular basis available in toolbar.
* Formula’s in excel, cell references, cell borders, applying filters.
* Understanding the significance cell, row, column formatting.

Plan for next session:

* Using conditional formatting for columns/rows.
* Understanding the working and usage of some common formulas like concatenation, vlookup, iferror, trim, subtotal, mathematical formula etc.
* Apply pivot table to set of data and using the rows and column selection to view data values.
* Generating some of the commonly used charts like column chart, pie chart etc.

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav.

Hello Everyone,

Hoping everyone is doing good.

My Protégé and I met on 19th Feb for a 2-hour session and went through the below topics in succession to previous meeting. We did a short recap of topics that were covered in out last meeting to establish the flow for session and for below topics that I taught

* Using conditional formatting for columns/rows.
* Understanding the working and usage of some common formulas like concatenation, Vlookup, if-error, trim, subtotal, mathematical formula etc.
* Apply pivot table to set of data and using the rows and column selection to view data values.
* Generating some of the commonly used charts like column chart, pie chart etc.
* HOMEWORK: To generate pivot table and chart based on sample data.

Plan for next session:

* Record a macro while applying both relative and absolute referencing.
* Create simple VBA subroutines that interface with the user.
* difference between subroutines and functions.
* Declare variables of varying data type and scope.

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav.

Hello Everyone,

Hoping everyone is doing good.

My Protégé and I last week for a 2-hour session as per schedule. We went through the homework 1and I was amazed to see the how well he developed the solution. Afterwards we did a short recap of topics that were covered in our last meeting to establish the flow for session and for below topics that I taught

* Record a macro while applying both relative and absolute referencing.
* Create simple VBA subroutines that interface with the user.
* difference between subroutines and functions.
* Declare variables of varying data type and scope.

Plan for next week’s session:

* Troubleshoot your code using debugging techniques.
* Setting break points and using stepover/ step-into when debugging.
* Querying Anything While Stepping Through Code
* Backing up or moving forward in code, halting the execution.

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav.

Hello Everyone,

Hoping everyone is doing good.

My Protégé and I met last week for a 2-hour session as per schedule. We did a short recap of topics that were covered in our last meeting to establish the flow for session and for below topics that I taught

* Troubleshoot your code using debugging techniques.
* Setting break points and using stepover/ step-into when debugging.
* Querying Anything While Stepping Through Code
* Backing up or moving forward in code, halting the execution.
* HOMEWORK: Creating VBA functions to perform calculation on button click.

Plan for next week’s session:

* Write proper VBA expressions and code that borrows Excel functions.
* Create your own user-defined functions.
* Write code that calls other subroutines in the same or other files.
* Design a subroutine using a modular programming approach.
* Explain the relationship between objects, properties, methods, and events.

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav.

Hello Everyone,

Hoping everyone is doing good.

My Protégé and I met last Saturday for the session. We did a short recap of topics that were covered earlier, went through the homework. Below were the discussed topics in the last session,

* Write proper VBA expressions and code that borrows Excel functions.
* Create your own user-defined functions.
* Write code that calls other subroutines in the same or other files.
* Design a subroutine using a modular programming approach.
* Explain the relationship between objects, properties, methods, and events.
* Checked homework 2: simple routine call to display prompt, VBA to copy data from one cell to another, perform mathematical operation on cells.
* Plan for next week’s session:
* Explain the relationship between objects, properties, methods, and events.
* Apply VBA statements to make reference to common objects, properties, and methods in VBA: Range, Selection, Active Cell, Cells, Offset, Rows, Columns, Count, Select, and Activate.
* Write basic subroutines that:
  + obtain input from the spreadsheet or input box
  + perform a calculation and
  + output the result to the spreadsheet or message box

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav

Hello Everyone,

Hoping everyone is doing good.

We have now completed 6th session, my Protégé and I met last weekend for the session. We did a short recap of topics that were covered earlier, went through the homework assessment. Below were the discussed topics in the last session,

* Explain the relationship between objects, properties, methods, and events.
* Apply VBA statements to make reference to common objects, properties, and methods in VBA: Range, Selection, Active Cell, Cells, Offset, Rows, Columns, Count, Select, and Activate.
* Write basic subroutines that:
  + obtain input from the spreadsheet or input box
  + perform a calculation and
  + output the result to the spreadsheet or message box
* Homework: Populate excel worksheet using other sheet data based on some conidtions.

Plan for next week’s session:

* Use the programming structures for selection and repetition in VBA code.
* Implement code that will validate user input.
* Create advanced subroutines and functions that use selection and repetition.
* Iterate through vectors using For…Next loops.
* Giving out a mini project, topic to be decided.

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav

Hello Everyone,

Hoping everyone is doing good.

We have now completed 7th session, my Protégé and I met last weekend for the session. We did a short recap of topics that were covered earlier, went through the homework assessment. We also discussed about the journey so far, topics covered, overall improvement for my protégé. Below were the discussed topics in the last session,

* Use the programming structures for selection and repetition in VBA code.
* Implement code that will validate user input.
* Create advanced subroutines and functions that use selection and repetition.
* Iterate through vectors using For…Next loops.
* Homework was done correctly few minor bugs but overall the protégé got a good understanding of topic to an extent that he can implement similar topics independently.
* Mini Project: A data entry sheet for student grade and generate a text file based on entered information.

Plan for next week’s session:

* Will assess the mini project.

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav

Hello Everyone,

Hoping everyone is doing good.

We have now completed 8th week and had final session, my Protégé and I met last weekend for the session. It had been a great journey for me and my protégé, we both have benefited from this activity, I got confidence boost in teaching and my protégé was able to build a good base understanding of excel and its VBA features which he intends to continue, by doing self-study and doing online courses and personal projects. This has been a one of its kind activity. I am thankful to the professor for having this activity as part of the academics. We did a short recap of topics that were covered earlier, went through the Project, the project was built without any error and file generation worked as expected. We discussed what could have been improved, what could be the things that my protégé would add to the project given more time. We also discussed about the journey so far, topics covered, and overall improvement of my protégé knowledge.

Looking forward to hearing everyone’s progress, thank you for reading.

Best regards,

Sandeep Satyanarayan Yadav