

Data Engineering Workshop



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```
...
  org = filterByOrg ? study.lead_organization === filterByOrg : true
  status = filterByStatus ? study.status === filterByStatus : true
  matchStatus) {
    ...
  }
  function filterStudies({ studies, filterByOrg, filterByStatus }) {
    return studies.filter(study => {
      ...
    })
  }
}
```

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Session #4: Star Schema + ETL (PART-1)

Session #5: ETL (PART-2)

If you don't attend Session #4 or Session #5 or both, you can see the slides and try with the concept of session 2 and 3 to do the requirements in the slides 7,8



Data Engineering Project

Today's agenda

- Designing our Data Warehouse using Star Schema. (The 4-Step Design)
- Building the data model in SSMS.
- Starting the ETL in Talend.

Data Engineering Project

The Data Warehouse Design (Star Schema)

- 4 – Step Design Process:
 - Select the business process to model. (DW Subject)
 - Declare the grain of the business process.
 - Choose the dimensions.
 - Identify the measures.
- Build the database in SSMS then Generate the Model in SSMS also.

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Starting the ETL

- Manipulate the Dataset as the model needs.
- Using Talend Open Studio.
- Load the Dimensions Data into SSMS.
- We will continue in the next session working on Fact Table.

Break Time

Set the timer on 10 mins



Data Engineering Project – Session #5

Steps – Session #5 (ETL-2)

- Follow the schema in SQL Server. Done
- Clean the data. Done
- Move the dimensions data to SQL. Done
- Build the Fact Table using Talend and put the data into SQL. DONE

Data Engineering Project

What are the requirements for the next session #6 ? (Student Work Needed)

- Create personal folder on GitHub with Formal Name.
- Design the Star Schema.
- Understand and clean the data.
- Load the Dimensions into SQL.
- Load the Fact Table into SQL.

Kahoot!

Practice and Fun!

We're almost done

I wish you all enjoyed.

We'll have a feedback form, and questions form now.

Next?: Understand the dataset, work on the project step by step with us, create folder with your **formal name** on the GitHub repo. to add your work. Follow Up !!!



Thanks

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