DataCraft

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Prüfung PL-300

offizielle Prüfungsseite: https://learn.microsoft.com/de-de/certifications/exams/pl-300

1000 Punkte, davon mindestens 700 erreichen

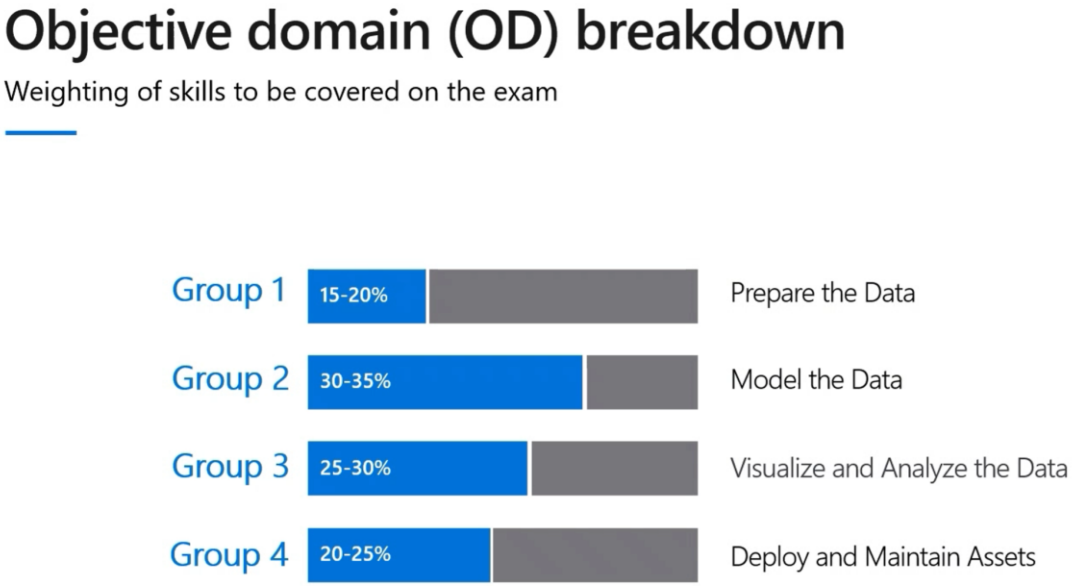
Fragetypen

- Multiple Choice
- Zuordnung Frage-Antwort / Paare
- korrekte Reihenfolge
- Einen Teil der Oberfläche im Screenshot markieren
- Case Study: viele Informationen, dann Wahl der Antwort
- Labs

Beispiele für Aufgabentypen: https://aka.ms/examdemo

Allgemeine FAQs: https://learn.microsoft.com/de-de/certifications/certification-exam-policies

4 Themen mit unterschiedlichen Gewichtungen



https://learn.microsoft.com/de-de/shows/exam-readiness-zone/preparing-for-pl-300-prepare-the-data-1-of-4

Power BI – Prüfungsthemen

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Recapping what we covered in Functional Group 1

- Get data from external sources and change source settings
- Data from shared or local dataset
- Storage modes
- Use Microsoft Dataverse
- Change the value in a parameter
- Connect to a data flow
- Profile the data
- Simplify data structure
- Evaluate and change column data types
- Shape and transform tables
- Combine queries
- Apply best practices for naming tables and columns
- Configure data loading
- Resolve data import errors

Recapping what we covered in Functional Group 2

- Define the tables
- Configure column and table properties
- Design and implement role-playing dimensions
- Relationships, cardinality, and cross-filter direction
- Design a data model that uses a star schema
- Create common date tables, calculated tables, hierarchies, calculated columns
- Create basic measures by using DAX
- Use CALCULATE to manipulate filters
- Replace implicit measures with explicit measures
- Use basic statistical functions and quick measures, and create semi-additive measures
- Identify poorly performing measures, relationships, and visuals
- Reduce cardinality levels to improve performance
- Use Q&A on a dashboard

Power BI – Prüfungsthemen

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Recapping what we covered in Functional Group 3

- Add, format and configure visualizations in reports
- Use custom visuals and themes, and conditional formatting
- Apply slicing, filtering, and sorting
- Configure the report page and mobile view
- Use the Analyze in Excel feature
- Choose when to use a paginated report
- Manage tiles on a dashboard
- Use the Q&A, AI visuals, and Quick Insights features
- Apply a dashboard theme
- Pin a report page to a dashboard
- Configure bookmarks, custom tooltips, interactions, and navigation for a report and Sync Slicers
- Use grouping, binnings, and clustering
- Use forecasting and reference lines in the Analytics pane

Recapping what we covered in Functional Group 4

- Identify when a gateway is required
- Configure a dataset scheduled refresh
- Configure row-level security group membership
- Provide access to datasets
- Configure incremental refresh and real-time data
- Create and configure a workspace
- Assign workspace roles
- Configure and publish a workspace app
- Update apps in a workspace
- Apply sensitivity labels to workspace content
- Configure data alerts and subscriptions
- Promote or certify Power BI content

1. Vorbereiten der Daten

1. Daten aus verschiedenen Datenquellen einlesen
   - Connectors (Datei, Datenbank, Unstrukturierte Daten, Dataverse, Dataflow), Datenquelleneinstellungen
   - Storage modes (Import, Direct Query, Dual/Combine)
   - Parameters in Power Query Editor
   - Daten profilieren (Column distribution – distinct/unique, Column profile, value distribution graph, column statistics)
2. Säubern, transformieren und Laden der Daten
   - Simplify data structure in Power Query Editor (rename, replace, replace null values, remove duplicates)
   - Evaluate and change column data types
   - shape and transform tables (promoting headers, renaming headers, removing top rows, removing columns)
   - combine queries (appending, merging)
   - best practices for naming tables and columns (descriptive business terms, spaces, consistent, remove pre/suffixes, avoid acronyms
   - resolve data import errors (query timeout, data type, could not find file, data not formatted as a table

2. Modellierung der Daten

1. Ein Datenmodell designen
   - Define a table (Properties), hierarchies, organize fields
   - star schema (facts, dimension)
2. Ein Datenmodell entwickeln
   - relationsships, cardinality, cross-filter
   - design and implement role-playing dimensions (two relations shipping date/order date to date table)
3. Berechnungen mittels DAX
   - create a common date table (source, DAX: CALENDAR() or CALENDARAUTO(), Power Query/M)
   - Neue Spalte
   - Quickmeasures, Measures, CALCULATE(aggr, filter)
   - time intelligence (DATESYTD, TOTALYTD, DATESBETWEEN, DATESINPERIOD, DATEADD, PARALLELPERIOD, SAMEPERIODLASTYEAR)
   - replace implicit measure by explicit (DAX)
   - MEDIAN, MEDIANX, NORM.DIS, NORM.INV, NORM.S.DIST, STDEV.P, STDEV.S, STDEVX.P, STDEVX.S
4. Performance optimieren
   - Performance analyzer
   - reduce cardinality levels
   - Use Q&A on a dashboard

3. Visualisieren und Analysieren der Daten

1. Reports erzeugen
   - Visuals, z.B. Funnel
   - Format (title, background, border, general, data colors, data labels, **tooltips**)
   - custom visuals (file extension pbiviz)
   - apply and customize themes
   - conditional formatting
   - slicer, filter, sort
   - configure report page
   - Analyze in Excel (Power BI-Dienst)
   - paginated report (multiple choice)
2. Dashboards erzeugen
   - Manage tiles on a dashboard
   - configure mobile view
   - Q&A Feature, Quick Insights
   - Dashboard theme
   - pin a report page to a dashboard

3. Visualisieren und Analysieren der Daten

3. Reports erweitern
   - bookmarks, tooltips
   - edit and configure interactions between visuals
   - Navigation (Button), Sync Slicers
   - group, and layer visuals
4. Muster und Trends erkennen
   - Drill through, cross-report drill through
   - Export: Excel, Powerpoint, PDF
   - Analyze feature
   - Identify outliers
   - continous and categorical axes
   - groupings, binnings, clustering
   - AI visuals (Q&A, Key Influencers, Decomposition Tree)
   - Forecasting and reference lines in Analytics pane

4. Bereitstellen und Verwalten von Ressourcen

1. Dateien und Datensätze managen
   - On-premise data gateway
   - dataset scheduled refresh
   - row-level-security (static role, dynamic role)
   - Provide access to datasets
   - incremental refresh and real-time data (Parameters, filter, policy)
2. Arbeitsbereiche managen
   - Arbeitsbereiche (workspaces)
   - Rollen (Admin, Member, Contributor, Viewer)
   - App konfigurieren, updaten
   - Sensitivity Labels bei sensiblen Daten
   - Alarme und Subscriptions
   - Inhalte promoten/zertifizieren