

# Tutorial Week 2 & 3 – Enterprise Systems – Sydney Campus



1. Summary of Lecture 1: Introduction to Enterprise Systems
2. Summary of Lecture 2: System Development Life Cycle and Introduction to SAF
3. Tutorial Week 2 & 3
4. Mastering SAP S/4HANA: A Comprehensive Guide to ERP System Integration and Application
5. Mastering SAP S/4HANA: A Comprehensive Guide to ERP System Integration and Application
6. Tutorial Week 2 & 3
7. Attendance

**Dr. Farshid Keivanian**

Welcome to Weeks 2 and 3 of our tutorial series, where we dive deeper into the world of Enterprise Systems at the Sydney Campus. These sessions build upon the foundational knowledge from our previous lectures on interface design evaluation and enterprise systems. We'll explore expert reviews, usability testing, and various evaluation methods that are crucial for assessing the effectiveness of user interfaces. As we advance through these tutorials, we'll also engage with practical scenarios and hands-on SAP exercises to integrate theory with application, ensuring a comprehensive understanding of systems development and ERP system functionalities. This will prepare you for more complex concepts and applications in the coming weeks.



## Overview of Enterprise Systems

Enterprise Systems are large-scale software applications designed to integrate and manage core business processes across an organization. Common types of ES include:

- **Enterprise Resource Planning (ERP):** Systems that integrate core business processes like finance, HR, manufacturing, supply chain, services, procurement, and others.
- **Customer Relationship Management (CRM):** Systems focused on managing customer information, sales, and marketing.
- **Supply Chain Management (SCM):** Systems that manage the flow of goods and services from manufacturing to customer delivery.

## Objectives of Enterprise Systems

- **Integration:** Bringing together various business processes to ensure they work cohesively.
- **Automation:** Reducing the need for manual intervention in business processes.
- **Data Analytics:** Providing tools to analyze business operations and make informed decisions.

## Benefits of Enterprise Systems

- Improved efficiency and productivity by streamlining processes.
- Enhanced visibility into operations, leading to better decision-making.
- Increased scalability and flexibility in business operations.

## Challenges of Implementing Enterprise Systems

- High initial costs and ongoing maintenance expenses.
- Complexity of installation and customization.
- Resistance to change from employees.

## 2. Enhancing SAP Software User Experience with Fiori: A Guide to Developing Custom Data Visualizations

---

SAP Fiori is a user experience design for SAP software. It represents a personalized, responsive, and simple user experience across devices and deployment options. Fiori uses web-based technologies like HTML5 and SAPUI5 to create a modern interface for SAP applications. While SAP Fiori itself is not a reporting tool, it provides a way to access SAP reports that have been created in the backend system.

For example, if the sales data is stored in an SAP system, you could use the analytical apps provided by SAP Fiori to visualize the data. These apps can connect to the backend SAP HANA database, where the data is processed, and then display the results in Fiori's user-friendly interface.

## 2. Enhancing SAP Software User Experience with Fiori: A Guide to Developing Custom Data Visualizations

---

However, to create custom visualizations, we would need to:

- Use SAP Analytics Cloud or SAP BusinessObjects for more complex and customizable reporting.
- Develop a custom SAPUI5 application that retrieves data from the SAP backend and uses a charting library to plot it.

SAPUI5 has its own set of controls for data visualization (e.g., VizFrame), which can be used to create charts and graphs.

## **2. Enhancing SAP Software User Experience with Fiori: A Guide to Developing Custom Data Visualizations**

Here's a simplified outline of the steps for creating a similar chart in an SAP system:

- 1. Data Preparation:** Ensure that the relevant sales data is available in the SAP system and accessible through an OData service or other API.
- 2. SAPUI5 Application Development:**
  - Develop a custom SAPUI5 application.
  - Utilize SAPUI5 data visualization libraries to create the chart.
  - Bind the data source to the chart to display the data.
- 3. Deployment:**
  - Deploy the application on the SAP Fiori launchpad.
  - Ensure that proper authorizations are set so the end-users can access it.

## **2. Enhancing SAP Software User Experience with Fiori: A Guide to Developing Custom Data Visualizations**

To actually produce these results using SAP Fiori, you would need access to the SAP system, relevant permissions, and possibly the help of an SAP developer to create or customize an app for these specific reporting needs. The detailed implementation would be quite technical and would go beyond what we could outline in a general summary.

### 3. A summary of Lecture 2: System Development Life Cycle and Introduction to SAP

Lecture 2 focuses on understanding the Systems Development Life Cycle (SDLC), the ERP Implementation Life Cycle, and introducing SAP ERP systems. The lecture aims to compare and contrast the SDLC with the ERP Life Cycles (ERPLC), emphasizing the roles of project management office (PMO) and project organization in successful ERP implementations. Key components include:

### 3. A summary of Lecture 2: System Development Life Cycle and Introduction to SAP

- **SDLC Overview:** A review of traditional methodologies and approaches of SDLC.
- **ERP Implementation Life Cycle:** Understanding ERP implementation through a systematic approach, highlighting traditional and rapid ERP life cycles.
- **Introduction to SAP:** Overview of SAP as a company, its history, ERP solutions, and key business suits.
- **Case Study Review:** Application of theories through the Global Bike company case study, which is a practical application in an ERP environment.

### 3. A summary of Lecture 2: System Development Life Cycle and Introduction to SAP

#### Practical Example: SAP Implementation in an Australian Context

##### Scenario

Consider an Australian manufacturing company, "Aussie Cycles," which specializes in producing high-end bicycles. The company is transitioning from legacy systems to SAP ERP to streamline operations, enhance production efficiency, and improve inventory management.

### 3. A summary of Lecture 2: System Development Life Cycle and Introduction to SAP

#### Implementation Steps

- 1. Project Preparation:** Define project goals, scope, and establish a project team. Secure executive buy-in from Aussie Cycles' senior management.
- 2. Business Blueprint:** Develop a detailed plan of the company's business processes to configure SAP ERP, focusing on critical areas such as Procurement, Sales, Inventory, and Financials.

### 3. A summary of Lecture 2: System Development Life Cycle and Introduction to SAP

3. **Realization:** Configure the SAP system according to the blueprint, perform necessary customization, and prepare for testing.
4. **Final Preparation:** Conduct user training, system testing, and data migration. Prepare for go-live by ensuring all business and system requirements are met.
5. **Go-Live and Support:** Switch operations from the legacy system to the SAP ERP system. Provide ongoing support and resolve any post-implementation issues.

### **3. A summary of Lecture 2: System Development Life Cycle and Introduction to SAP**

#### **Example: Inventory Management Enhancement**

##### **Current Problem:**

Aussie Cycles has issues with stock outs and excess inventory due to poor inventory management and forecasting.

##### **SAP Solution:**

Implement SAP's Material Management module to automate inventory tracking, improve material requirement planning, and optimize stock levels based on real-time data.

##### **Expected Outcome:**

Enhanced production planning, reduced storage costs, and improved customer satisfaction through better product availability.

### 3. A summary of Lecture 2: System Development Life Cycle and Introduction to SAP

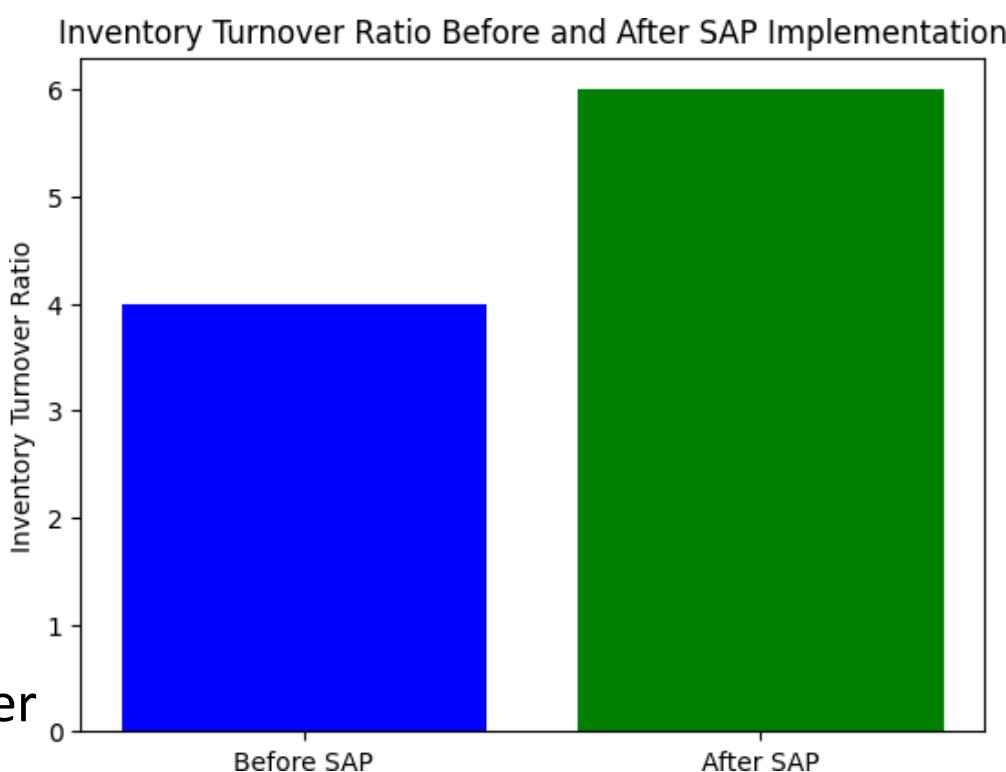
#### Visualization: Impact of SAP Implementation on Inventory Efficiency

Let's create a simple plot to visualize the expected improvement in inventory turnover ratio before and after SAP implementation. This ratio measures how often a company replaces its inventory in a given period and is a critical metric for assessing the efficiency of inventory management.

The bar chart illustrates the hypothetical impact of SAP implementation on the inventory turnover ratio of a business, where the inventory turnover ratio represents the number of times a company's inventory is sold and replaced over a period.

Before the implementation of SAP, the turnover ratio was 4, indicating that the inventory was turned over 4 times a year. After implementing SAP, the ratio increased to 6, suggesting a more efficient use of inventory, with stock being replenished 6 times a year.

This 50% increase in the turnover ratio implies that the company is able to sell and restock its inventory more frequently, which can be indicative of better inventory management and potentially improved sales processes, assuming constant or improved sales levels.



#### 4. Mastering SAP S/4HANA: A Comprehensive Guide to ERP System Integration and Application

For us to effectively understand about SAP S/4HANA and its application within enterprise systems, a structured approach to the content can be extremely beneficial. Here's a comprehensive breakdown of key concepts, integrated with practical examples and relevant visual aids when necessary.

#### Core Concepts for Understanding SAP S/4HANA

##### 1. Introduction to ERP Systems

- What is an ERP System?
- Purpose and Benefits of ERP Systems
- Overview of SAP S/4HANA as an advanced ERP system.

##### 2. Components of SAP S/4HANA

Week 4 & 5, Week 6 & 7, Week 8 & 9

- **Core Modules:** Financials, Controlling, Sales, Accounting, Procurement, Fulfillment, Human Resources.
- **SAP Fiori:** Introduction to the user interface used in S/4HANA for enhanced user experience.

### **3. Navigating SAP S/4HANA**

- Login and User Interface: How to access and navigate the system.
- Use of Fiori Launchpad: Understanding its layout and customization options.

### **4. Data Management**

- Master Data vs. Transactional Data: Definitions and roles within SAP systems.
- Material Master: Importance in inventory and supply chain management.

### **5. Business Process Integration**

- How SAP integrates and automates various business processes across departments.
- Example workflows like Order to Cash or Procure to Pay.

### **6. Reporting and Analytics**

- Overview of reporting tools available in SAP S/4HANA.
- How to generate and customize reports.

### Practical Example in Australia

To provide a practical example, consider an Australian manufacturing company using SAP S/4HANA to integrate and streamline their operations:

- **Company Profile:** A Melbourne-based company producing and distributing electronics.
- **Business Need:** Integration of processes across multiple departments from manufacturing to sales.
- **SAP Implementation:** Utilization of SAP modules to manage production schedules, inventory, procurement, sales orders, and customer relationships.

## 6. Tutorial Week 2 & 3

A) SAP Log in: <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=274&sap-language=EN>

The screenshot shows a web browser displaying an SAP log-in page. The URL in the address bar is <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=274&sap-language=EN>. The page contains the following fields:

- Username: Learn-XXX
- Initial Password: learnGBI
- Client: 274

The password field contains six dots (.....). A red box highlights the following group of fields:

- Learn-649 (Username)
- ..... (Initial Password)
- Language: EN - English
- Client: 274
- Log On button

Below the highlighted group is a link labeled "Change Password".



HOLMES  
INSTITUTE

HS2041 – Enterprise Systems

## Introduction to SAP ERP S/4HANA

# Overview

- SAP is a German Company (formed in 1972), that is currently one of the world's leading producers of software for the management of business processes (Enterprise Resource Planning Systems etc)
- SAP stands for **S**ystem **A**pplications and **P**roducts in data processing.
- S/4HANA refers to the **4<sup>th</sup> Generation** of SAP Business Suite based on the in-memory database (**H**igh performance **AN**alytic **A**ppliance) that allows companies to perform transactions and analyse business data in real time.
- **Fiori** is a design language and user experience approach that supports the creation of business apps with a consumer-grade user experience, turning casual users into SAP experts with simple screens that run on any device.

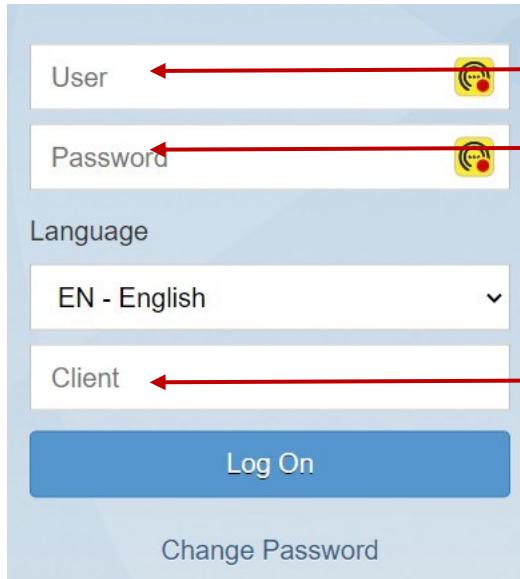


HOLMES  
INSTITUTE

## Logging in to S/4HANA

# Logging in to the SAP S/4HANA System

- To access the SAP system, use the Web-GUI link below:
  - <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=274&sap-language=EN>
  - The SAP Login Screen appears, follow the advice to sign in:



The SAP Login screen displays the following fields:

- User: A text input field with a small user icon.
- Password: A text input field with a small user icon.
- Language: A dropdown menu set to "EN - English".
- Client: A text input field with a small user icon.
- Log On: A blue rectangular button.
- Change Password: A link at the bottom left.

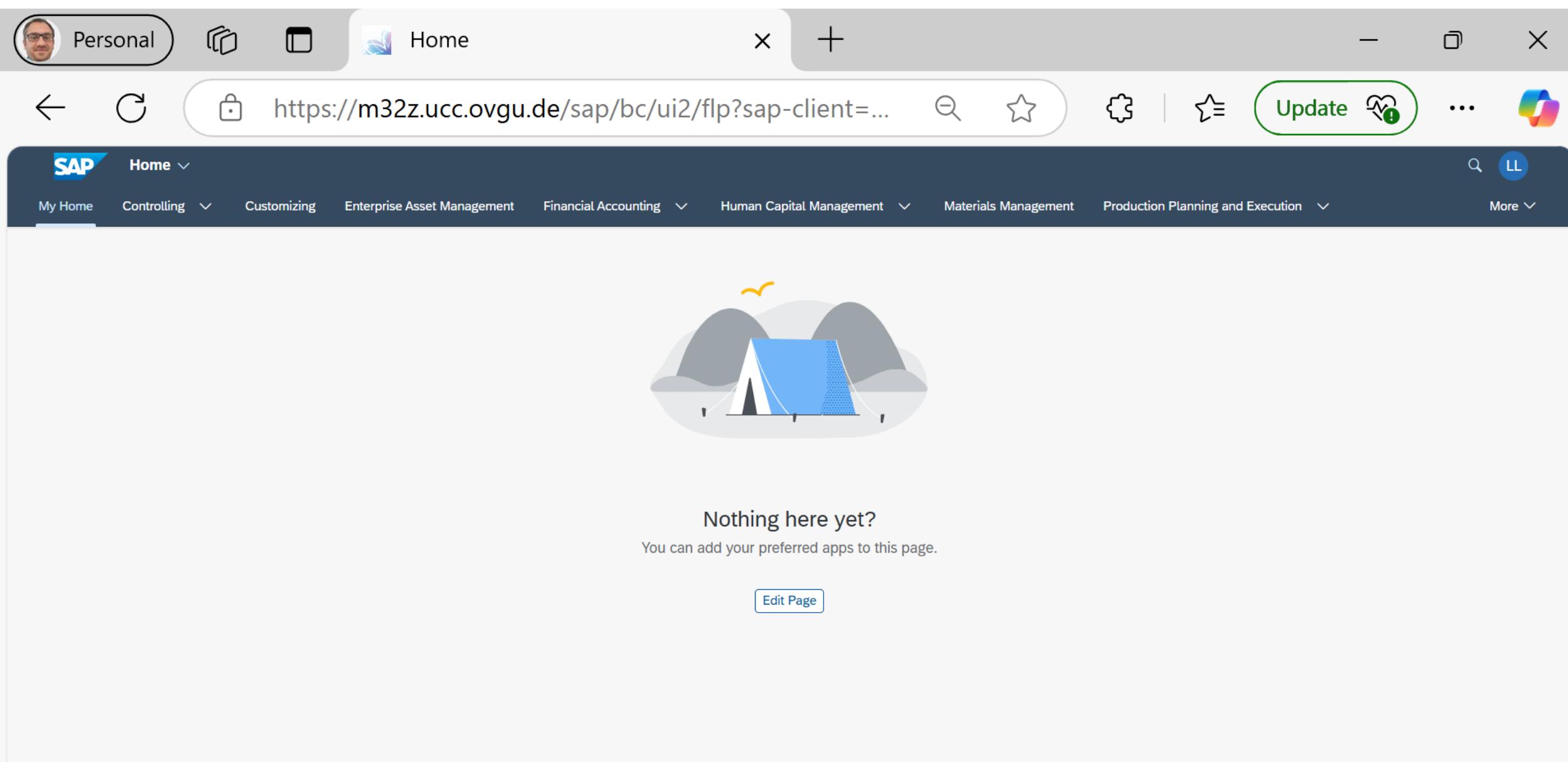
- Your username is Learn-XXX (XXX is the number provided by your Lecturer/Tutor).
  - The initial password is learnGBI (case sensitive).
  - The Client number for Holmes Institute is 274
- The password needs to be changed after the initial sign-in and will be used for all future log-ins.



HOLMES  
INSTITUTE

# Understanding the GUI Interface for S/4HANA

- The first screen that appears is the SAP Fiori launch home pad and is the main entry point for the SAP Fiori apps on mobile and desktop devices.



The screenshot shows the SAP Fiori Launch Pad interface. At the top, there is a browser header with a user profile icon, a "Personal" button, a refresh icon, a search icon, a star icon, a gear icon, a "Update" button, and a "..." button. The URL bar displays the address <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. Below the header is a dark blue navigation bar with the SAP logo and various menu items: My Home, Controlling, Customizing, Enterprise Asset Management, Financial Accounting, Human Capital Management, Materials Management, Production Planning and Execution, and More. The "My Home" item is highlighted. The main content area features a large, stylized graphic of a tent set up under a grey cloud-like canopy. Below the graphic, the text "Nothing here yet?" is displayed, followed by the subtext "You can add your preferred apps to this page." At the bottom of the content area is a blue "Edit Page" button.



## ■ Tutorial 2 &amp; 3

The screenshot shows a web browser window with the following details:

- Address Bar:** https://holmes.blackboard.com/ultra/courses/\_...  
The URL is partially visible, ending with "/ultra/courses/\_...".
- Toolbar:** Includes Personal, Content, and ICT202 T1 2025 tabs, along with standard browser controls like back, forward, search, and refresh.
- Content Area:**
  - Course Header:** 2025-T1-HS2041: Enterprise Systems
  - Section:** Tutorial Materials
  - Edit Mode:** ON
- Sidebar:** A vertical sidebar with icons for various course sections, with "Tutorial Materials" highlighted by a red box.
- Main Content:**
  - Title:** Tutorial Materials
  - Navigation:** Build Content, Assessments, Tools, Partner Content
  - Section:** SAP Access details
  - Attached File:** SAP Tutorial V3 07032024.docx (9.772 MB)
  - Text:** Hello students,  
Kindly see the login details for SAP S/4 HANA below for your tutorials:  
Clients: 274  
WEB-GUI access <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp>
  - List:** 1. The S/4HANA logon screen appears.  
2. The student accounts
    - Username: Learn-250 to Learn-350; Learn-000 to Learn-050
    - Default Password: learnGBI

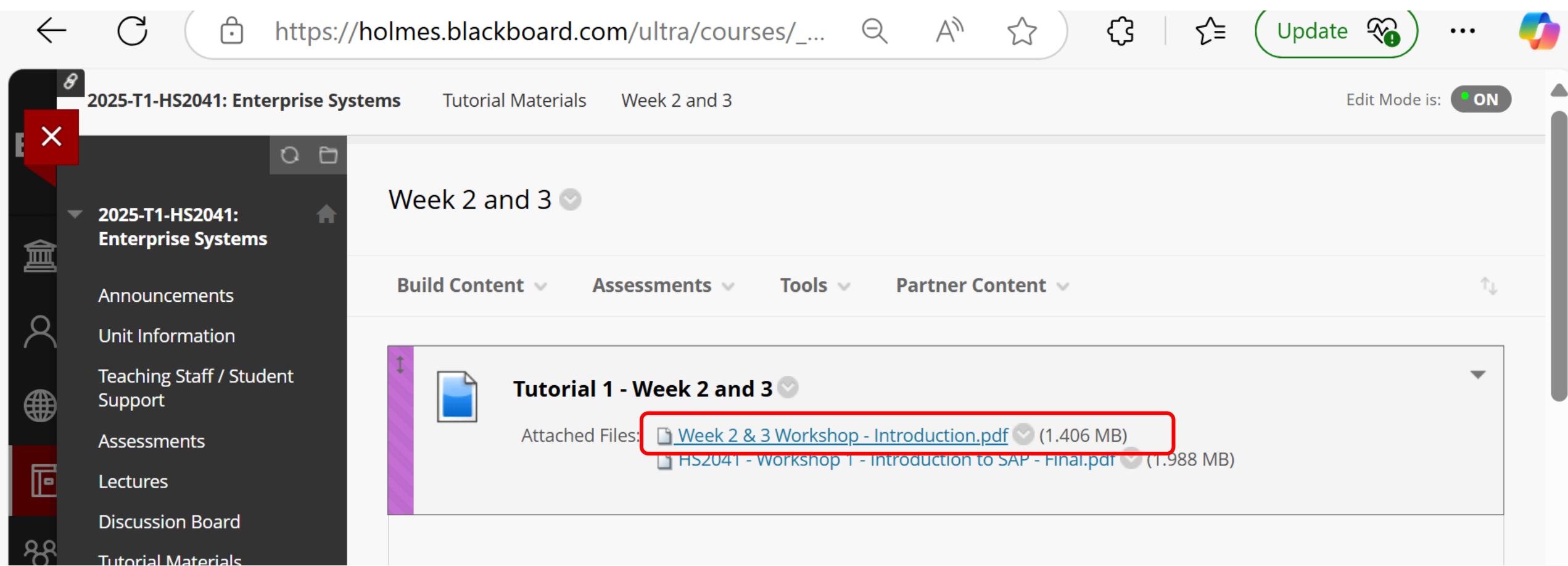


## ■ Tutorial 2 & 3

The screenshot shows a web browser interface with the following details:

- Top Bar:** Personal, Google Sheets, Google Slides, Your recent job, Content, ICT202 T1 2025.
- Address Bar:** https://holmes.blackboard.com/ultra/courses/\_...  
Attached Files: SAP Tutorial V3 07032024.docx (9.772 MB)
- Left Sidebar (Subject Management):**
  - Control Panel
  - Content Collection
  - Subject Tools
  - Student Tracking
  - Grade Centre
  - Users and Groups
  - Customisation
- Content Area:**
  - Interactive Tutorials:** Availability: Item is hidden from students.
    - Week 2 and 3** (highlighted with a red border)
    - Week 4 and 5**
    - Week 6 and 7**
- Bottom Right:** Holmes Institute

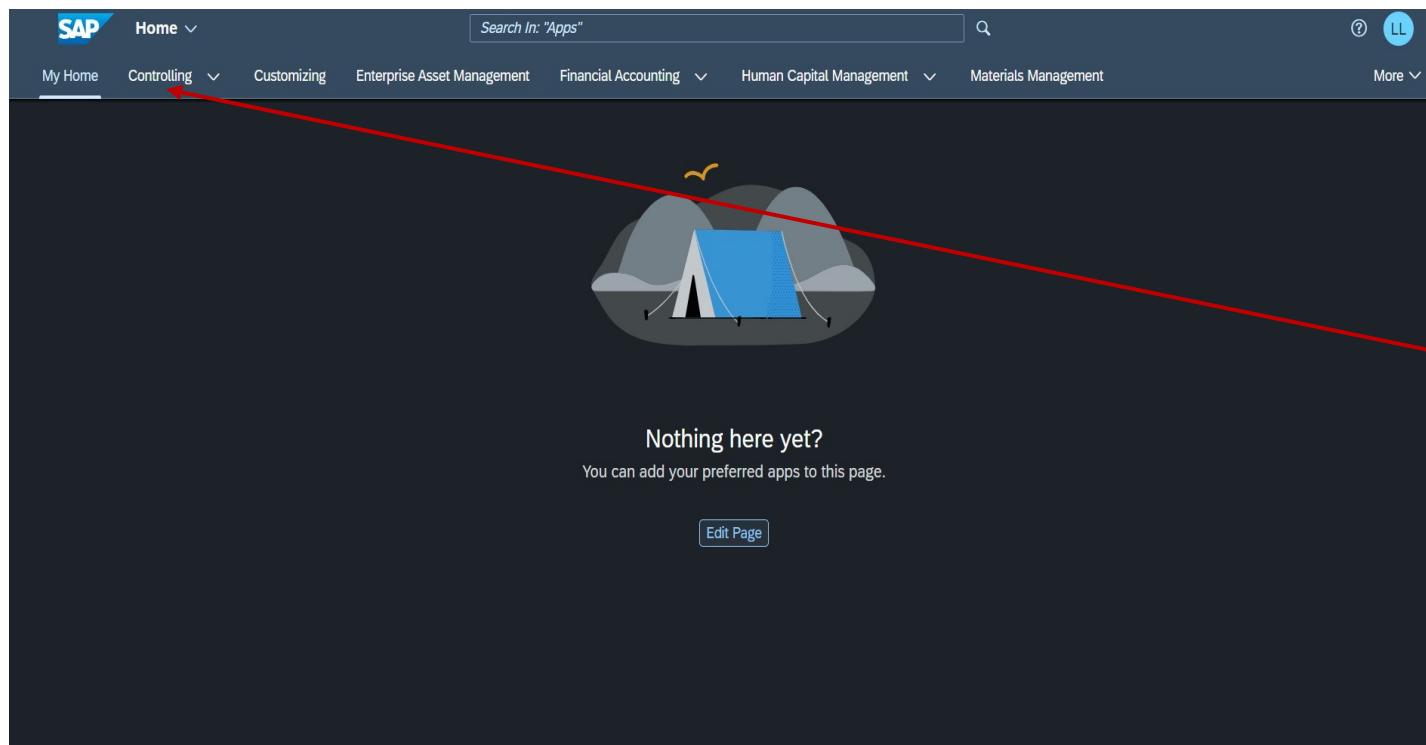
## ■ Tutorial 2 & 3 – Tasks and Instructions



The screenshot shows the Blackboard Ultra interface for the course "2025-T1-HS2041: Enterprise Systems". The left sidebar contains links for Announcements, Unit Information, Teaching Staff / Student Support, Assessments, Lectures, Discussion Board, and Tutorial Materials. The main content area is titled "Week 2 and 3" and includes tabs for Build Content, Assessments, Tools, and Partner Content. A section titled "Tutorial 1 - Week 2 and 3" lists attached files: "Week 2 & 3 Workshop - Introduction.pdf" (1.406 MB) and "HS2041 - Workshop 1 - Introduction to SAP - Final.pdf" (1.988 MB). The "Week 2 & 3 Workshop - Introduction.pdf" file is highlighted with a red box.

# Exploring the Controlling Space

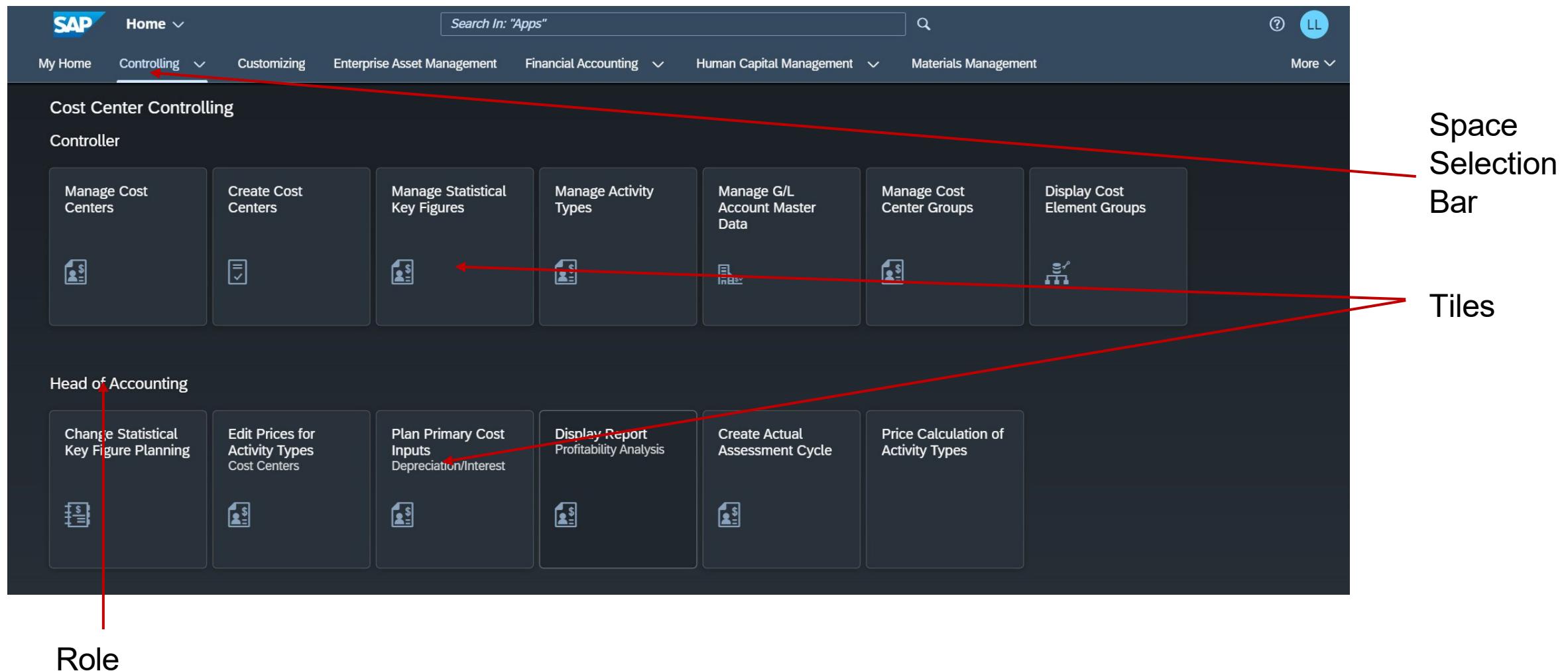
- For the Introduction workshop (Week 2 & 3), we will be using the Controlling space from the Selection bar.



Click on  
**Controlling** in  
the Space  
Selection Bar

# Understanding the Fiori GUI

- The Fiori GUI includes several elements as referred below:





HOLMES  
INSTITUTE

## Global Bikes Inc. (Case Study Scenario)

## Case Study Scenario

- Global Bikes Inc (GBI) is a fictitious company whose data is provided in the SAP System for analytical purposes.
- The company (GBI) was founded in 2001 following the merger of two bicycle manufacturers, one based in the US and the other in Germany.
- GBI has three lines of business:
  - deluxe and professional touring bikes,
  - men's and women's off-road bikes,
  - and bike accessories.
- GBI sells its bikes to a network of specialised dealers throughout the world, and it procures its raw materials from a variety of suppliers globally.

## Case Study Scenario (Contd)

- GBI has two manufacturing facilities in the US and one in Germany.
- It also has three additional warehouses, two in the US and one in Germany.
- GBI has more than 100 employees globally.
- The organisation uses SAP ERP to support its processes.
- The company has a new bicycle for sale- Mongoose Mountain Bike. The SAP systems contain all the necessary data to support GBI's business processes.

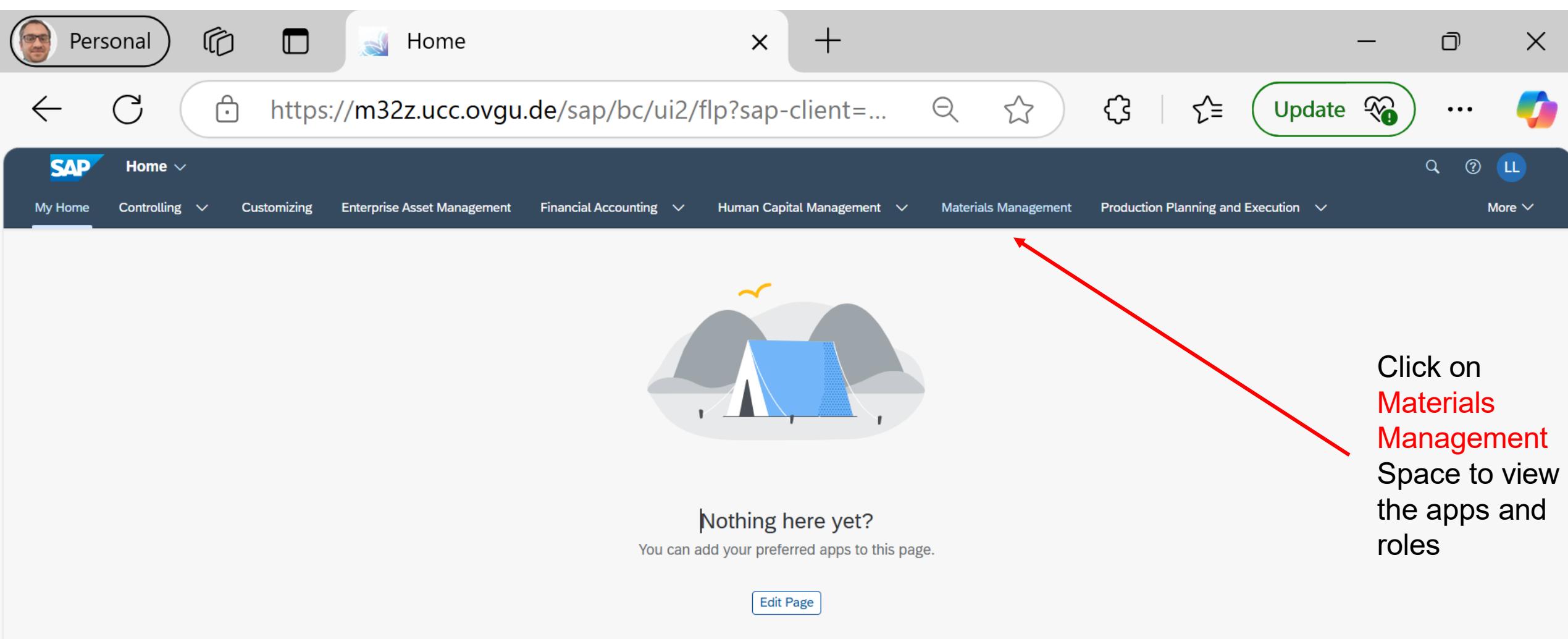


HOLMES  
INSTITUTE

# Understanding Data Navigation in SAP S/4HANA

# Master Data Navigation

- This exercise is focused on navigating the Master Data for a particular product.

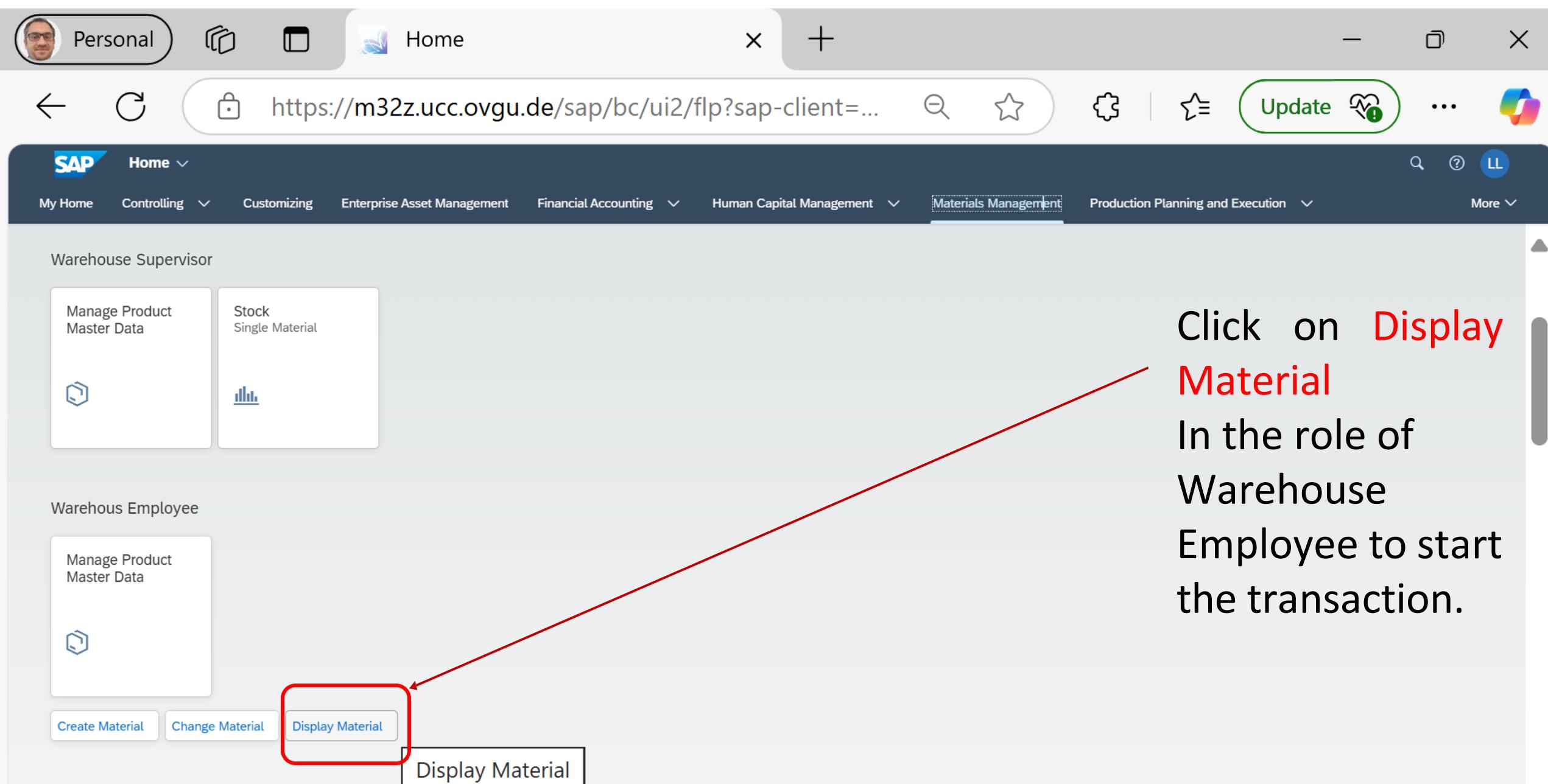


The screenshot shows the SAP Fiori Launchpad interface. At the top, there is a browser-like header with a user profile icon, 'Personal' button, ribbon icons, 'Home' button, search bar, and various navigation buttons. The URL in the address bar is <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. Below the header is the SAP navigation bar with links for 'My Home', 'Controlling', 'Customizing', 'Enterprise Asset Management', 'Financial Accounting', 'Human Capital Management', 'Materials Management' (which is highlighted with a red arrow), and 'Production Planning and Execution'. To the right of the navigation bar are search, help, and more options. The main content area features a large blue tent icon with clouds, followed by the text 'Nothing here yet? You can add your preferred apps to this page.' and a 'Edit Page' button. A red arrow points from the text 'Click on Materials Management Space to view the apps and roles' to the 'Materials Management' link in the navigation bar.

Click on **Materials Management** Space to view the apps and roles

# Master Data Navigation (Contd)

- The task is to view the particulars of a specific product “Deluxe Touring Bike”. The roles in the space indicate that the “Warehouse Employee” role is suitable to “Display Materials”



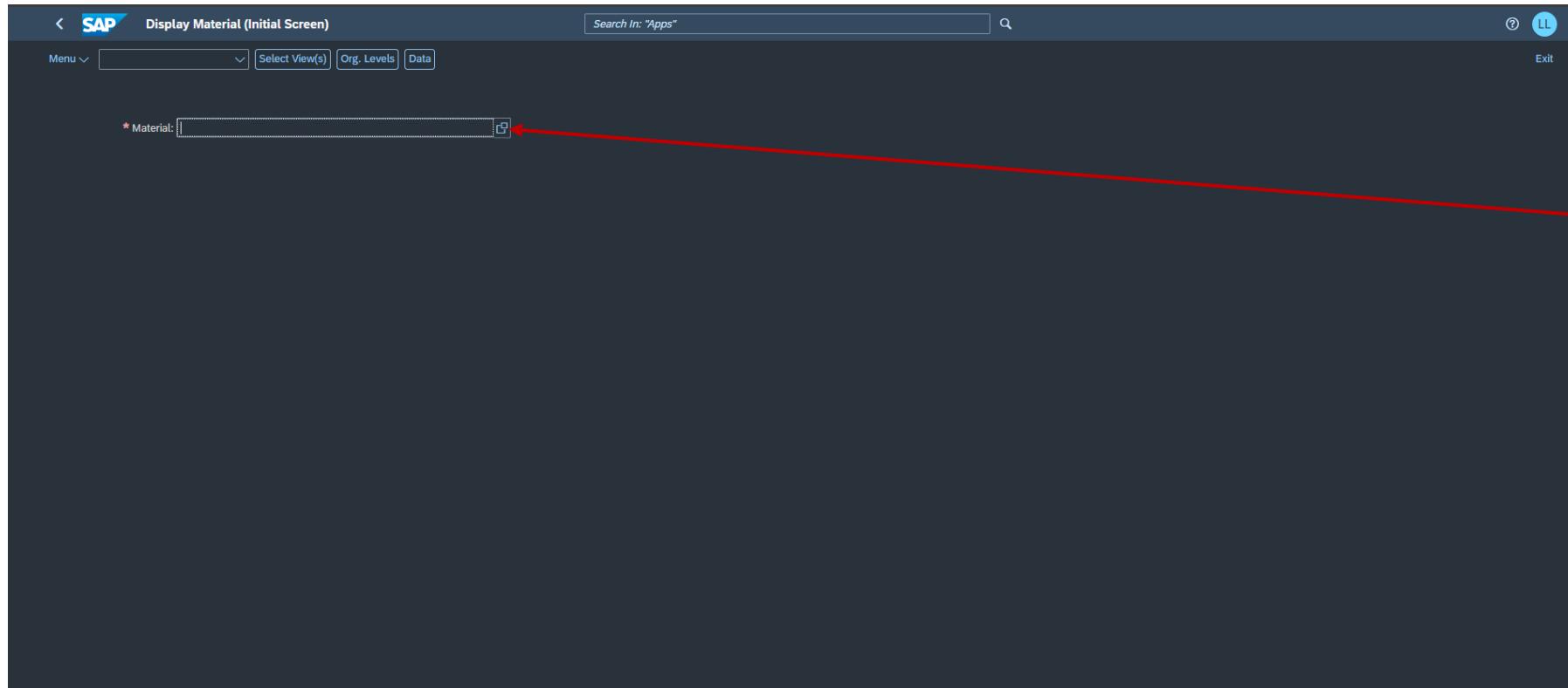
The screenshot shows the SAP Fiori Launchpad interface. The top navigation bar includes a user profile, a Personal button, a Home icon, a search bar with the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>, and various icons for search, update, and more. The main menu bar at the top has sections: SAP, Home, My Home, Controlling, Customizing, Enterprise Asset Management, Financial Accounting, Human Capital Management, Materials Management (which is highlighted), Production Planning and Execution, and More.

The main content area is titled "Warehouse Supervisor". It contains two cards: "Manage Product Master Data" (with a gear icon) and "Stock Single Material" (with a bar chart icon). Below this, under "Warehouse Employee", there are three buttons: "Manage Product Master Data" (gear icon), "Create Material" (blue button), "Change Material" (blue button), and "Display Material" (blue button). A red arrow points from the text "Click on Display Material" to the "Display Material" button.

**Click on Display Material  
In the role of  
Warehouse Employee to start  
the transaction.**

# Master Data Navigation (Contd)

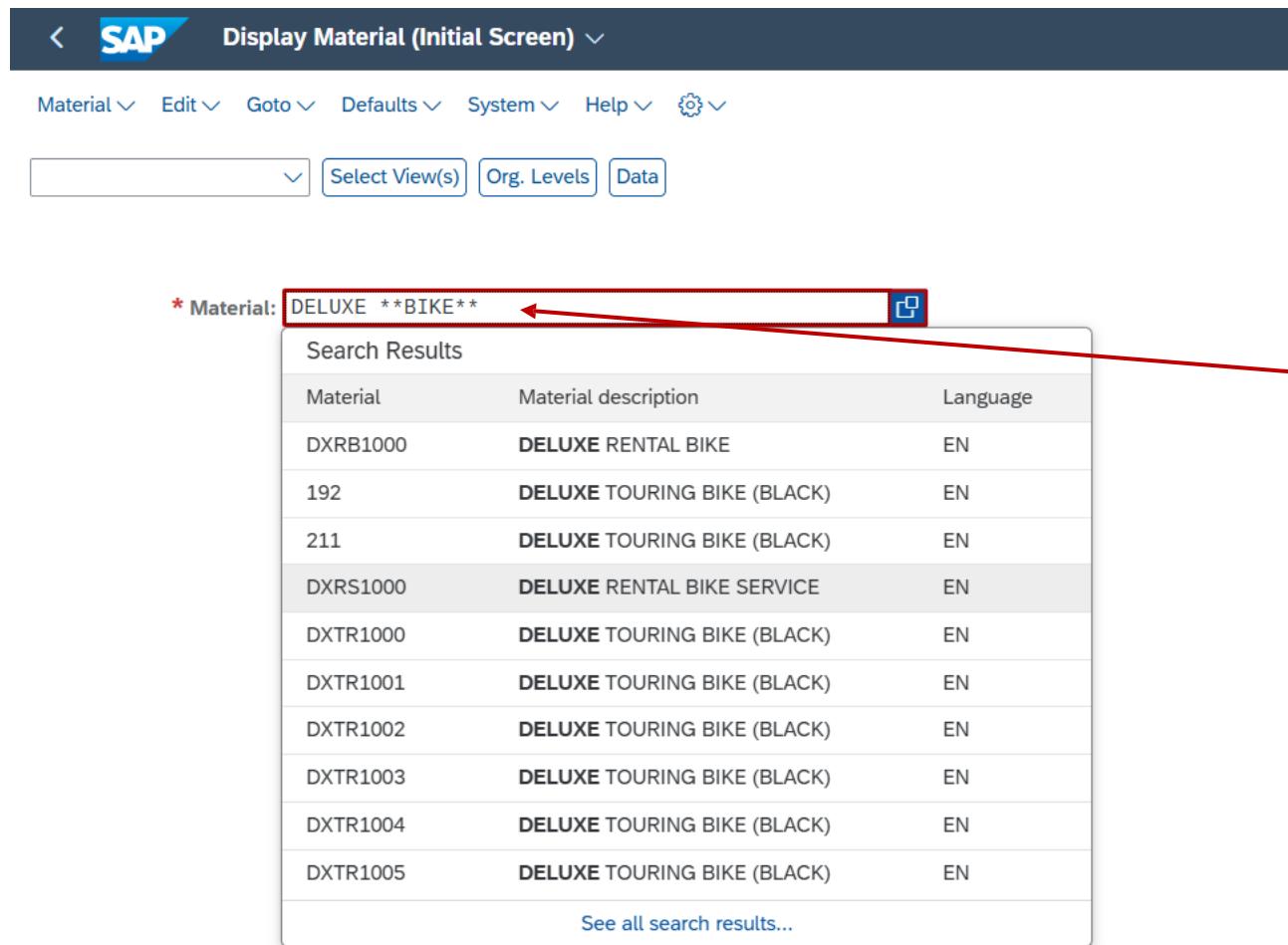
- Searching for a particular item can be initiated by using wildcards as illustrated in the [tutorial handout](#).
- To commence the search, the search dialog box must be displayed.



Click on Icon  
to display the  
search dialog  
box.

# Master Data Navigation (Contd)

- We will use the materials description to search for the Deluxe Touring Bike particulars.



The screenshot shows the SAP Display Material (Initial Screen). At the top, there is a navigation bar with links: Material, Edit, Goto, Defaults, System, Help, and a gear icon. Below the navigation bar are three buttons: Select View(s), Org. Levels, and Data. A search input field contains the text "DELUXE \*\*BIKE\*\*". A red arrow points from the text "Type Deluxe\*Bike\*" in the adjacent text block to the search input field. A red box highlights the search input field. A red double-headed arrow points from the search input field to the search results table. The search results table has columns: Material, Material description, and Language. The table lists several entries, with the first entry highlighted in grey. At the bottom of the table, there is a link "See all search results...".

Material	Material description	Language
DXRB1000	DELUXE RENTAL BIKE	EN
192	DELUXE TOURING BIKE (BLACK)	EN
211	DELUXE TOURING BIKE (BLACK)	EN
DXRS1000	DELUXE RENTAL BIKE SERVICE	EN
DXTR1000	DELUXE TOURING BIKE (BLACK)	EN
DXTR1001	DELUXE TOURING BIKE (BLACK)	EN
DXTR1002	DELUXE TOURING BIKE (BLACK)	EN
DXTR1003	DELUXE TOURING BIKE (BLACK)	EN
DXTR1004	DELUXE TOURING BIKE (BLACK)	EN
DXTR1005	DELUXE TOURING BIKE (BLACK)	EN

Type **Deluxe\*Bike\*** in the Material Description and press the Enter key

# Master Data Navigation (Contd)

- We will use the materials description to search for the Deluxe Touring Bike particulars.

SAP Display Material (Initial Screen) ▾

Material ▾ Edit ▾ Goto ▾ Defaults ▾ System ▾ Help ▾ 

Select View(s) Org. Levels Data

\* Material:  

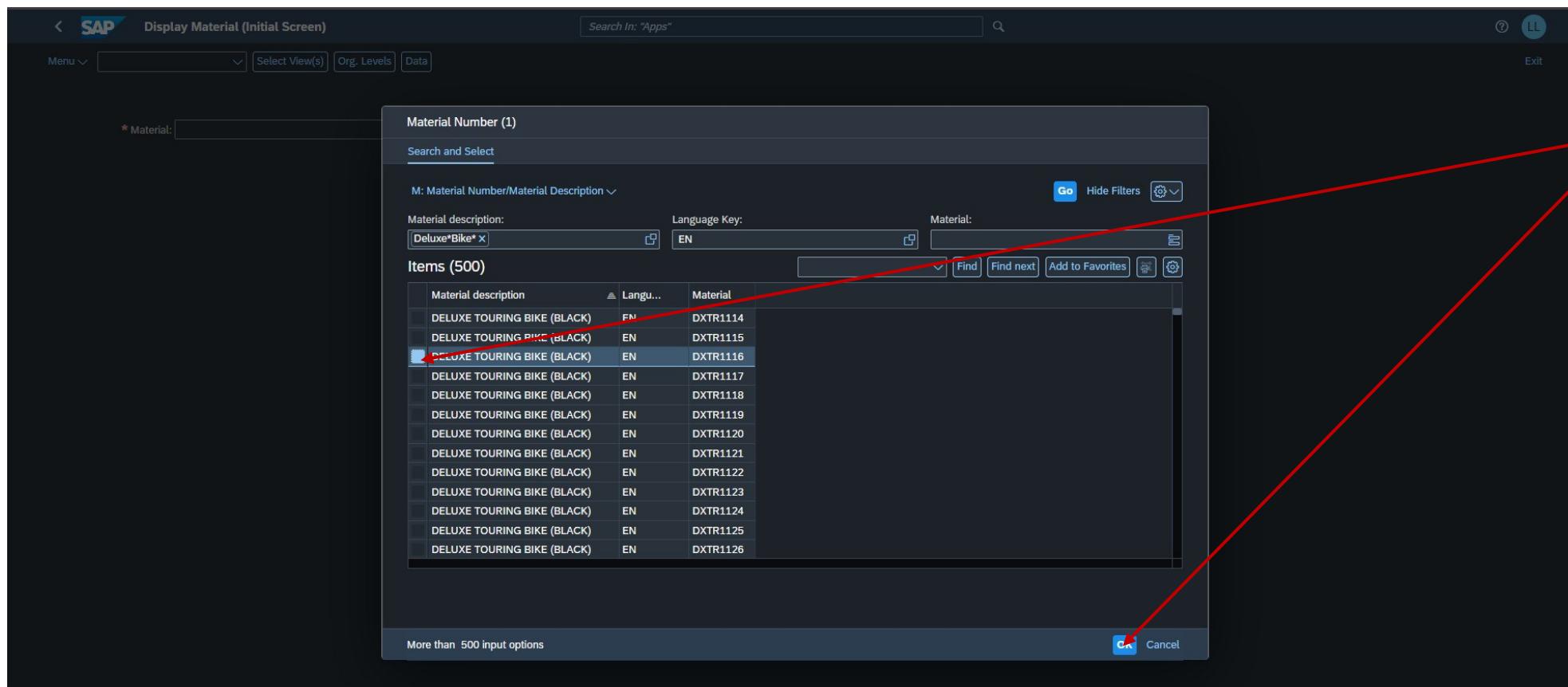
Search Results		
Material	Material description	Language
DXTR1114	DELUXE TOURING BIKE (BLACK)	EN
DXTR1141	DELUXE TOURING BIKE (BLACK)	EN
DXTR1411	DELUXE TOURING BIKE (BLACK)	EN
DXTR1110	DELUXE TOURING BIKE (BLACK)	EN
DXTR1111	DELUXE TOURING BIKE (BLACK)	EN
DXTR1112	DELUXE TOURING BIKE (BLACK)	EN
DXTR1113	DELUXE TOURING BIKE (BLACK)	EN
DXTR1115	DELUXE TOURING BIKE (BLACK)	EN
DXTR1116	DELUXE TOURING BIKE (BLACK)	EN
DXTR1117	DELUXE TOURING BIKE (BLACK)	EN

See all search results...

Or just type DXTR1114 or  
DXTR1116

# Master Data Navigation (Contd)

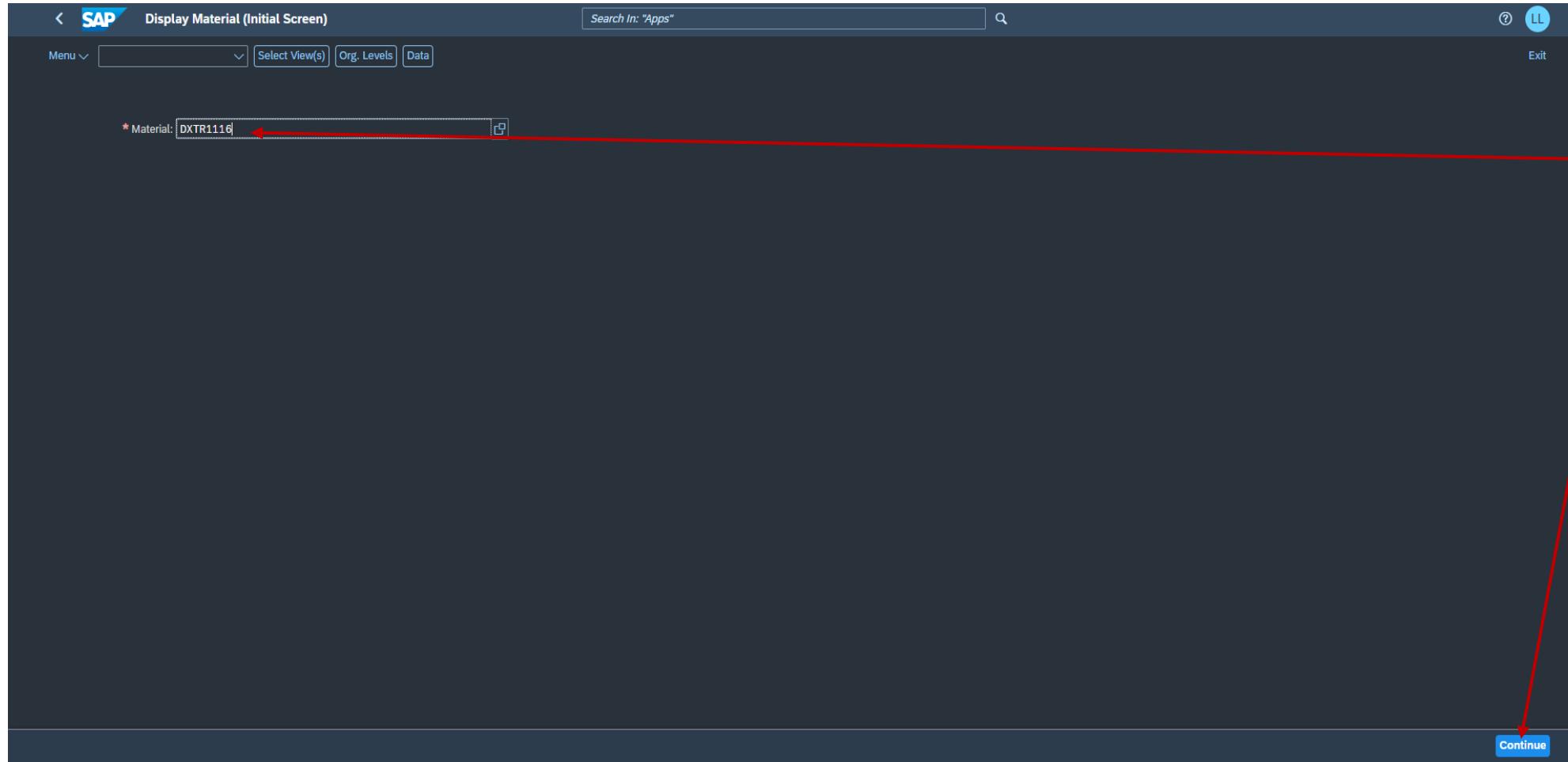
- To view the product details, click on any matching item from the list.



Select any matching item from the list and press ok

# Master Data Navigation (Contd)

- The selection is displayed as Item code, press continue.



Product  
Item code  
is  
displayed,  
press  
continue.



# Master Data Navigation (Contd)

- The next screen requires the selection of the data source.

Search In: "Apps"

Select View(s)

View

- Basic Data 1
- Basic Data 2
- Sales: Sales Org. Data 1
- Sales: Sales Org. Data 2
- Sales: General/Plant Data
- Extended SPP Basic Data
- International Trade: Export
- Sales Text
- MRP 1
- MRP 2
- MRP 3
- MRP 4
- Advanced Planning
- Extended SPP
- Forecasting
- Work Scheduling
- General Plant Data / Storage 1
- General Plant Data / Storage 2
- Warehouse Management 1
- Warehouse Management 2
- Accounting 1
- Accounting 2
- Costing 1
- Costing 2
- Plant Stock
- Storage Location Stock
- WM Execution
- WM Packaging

View selection only on request

✓ Org. Levels Data  Default Setting

Select View(s)

View

- International Trade: Export
- Sales Text
- MRP 1
- MRP 2
- MRP 3
- MRP 4
- Advanced Planning
- Extended SPP
- Forecasting
- Work Scheduling
- General Plant Data / Storage 1
- General Plant Data / Storage 2
- Warehouse Management 1
- Warehouse Management 2
- Accounting 1
- Accounting 2
- Costing 1
- Costing 2
- Plant Stock
- Storage Location Stock
- WM Execution
- WM Packaging

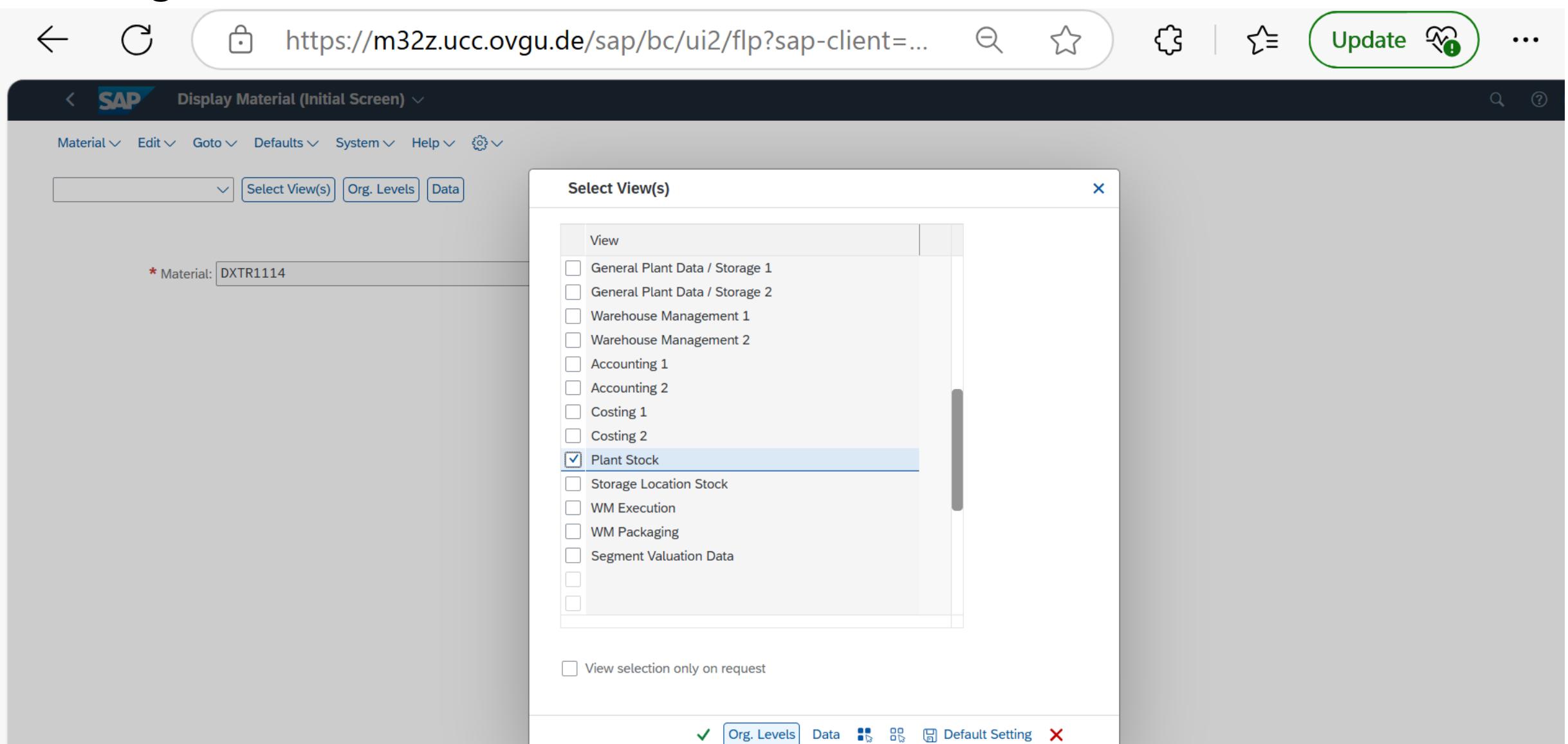
View selection only on request

✓ Org. Levels Data  Default Setting

Use the scroll bar to view more options, and select **Plant Stock** and click on

# Master Data Navigation (Contd)

## Click Org. Level



The screenshot shows the SAP Fiori Master Data Navigation interface. At the top, there is a browser header with a lock icon, the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>, a search icon, a star icon, a gear icon, a favorite icon, an update button with a circular arrow icon, and a three-dot menu icon.

The main header bar displays the SAP logo and the title "Display Material (Initial Screen)". Below the header, there is a navigation bar with links: Material, Edit, Goto, Defaults, System, Help, and a settings icon.

The main content area shows a material search field with the value "DXTR1114". Below the search field are four buttons: "Select View(s)", "Org. Levels", "Data", and a dropdown menu icon.

A modal dialog titled "Select View(s)" is open in the center. It contains a table with a column labeled "View" and a list of options. The "Plant Stock" option is selected, indicated by a checked checkbox and a blue highlight. Other options include General Plant Data / Storage 1, General Plant Data / Storage 2, Warehouse Management 1, Warehouse Management 2, Accounting 1, Accounting 2, Costing 1, Costing 2, Storage Location Stock, WM Execution, WM Packaging, and Segment Valuation Data.

At the bottom of the "Select View(s)" dialog, there is a checkbox labeled "View selection only on request".

At the very bottom of the screen, there is a footer bar with icons for "Org. Levels" (highlighted with a green checkmark), "Data", and "Default Setting".



# Master Data Navigation (Contd)

Click Plant to see a list of possible entries

The screenshot shows the SAP Master Data Navigation interface. At the top, there is a navigation bar with links: Material, Edit, Goto, Defaults, System, Help, and a gear icon. Below the navigation bar, there are three buttons: Select View(s), Org. Levels, and Data. A search bar contains the text "DXTR1114". A red arrow points from the text "Click Plant to see a list of possible entries" down to the "Plant" button in the "Organizational Levels" dialog box.

\* Material: DXTR1114

Organizational Levels

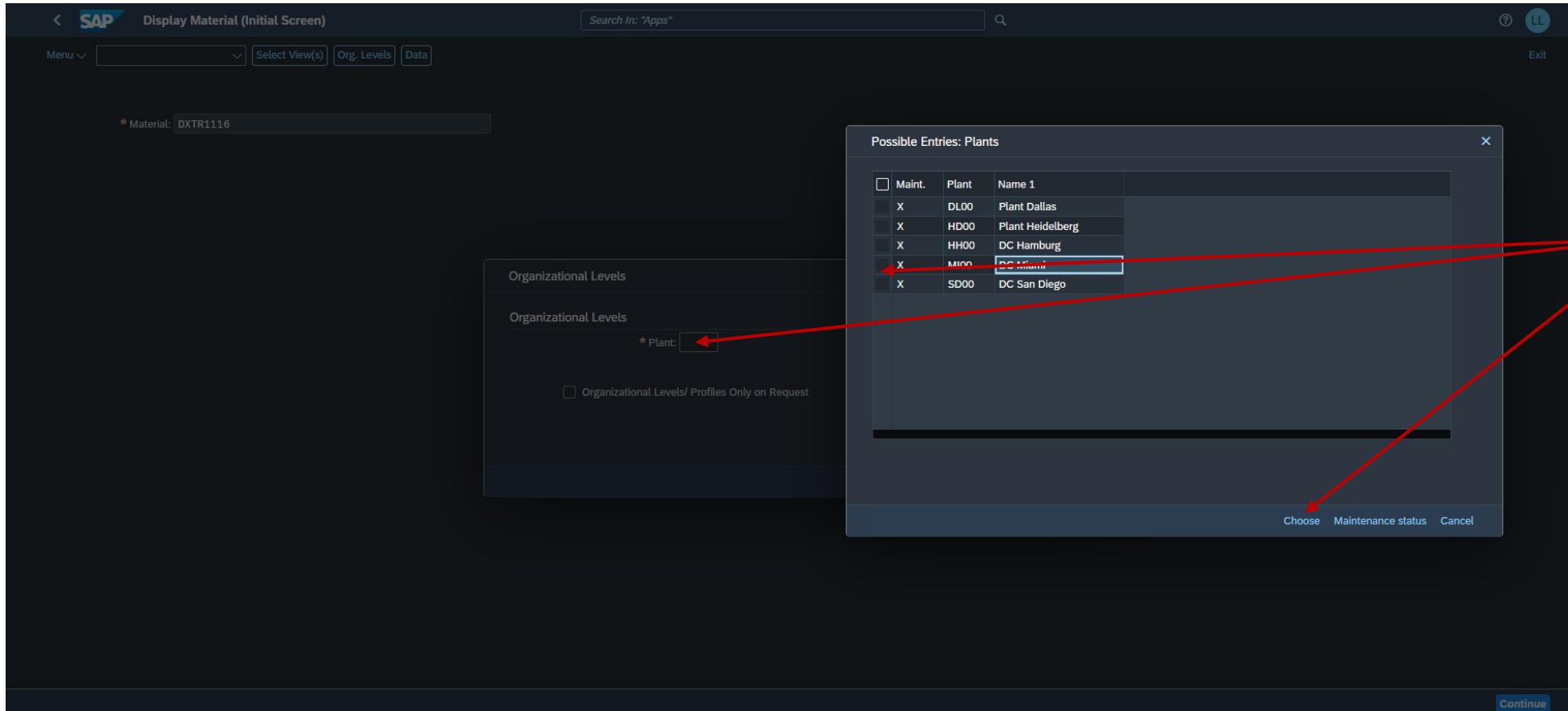
\* Plant:

Organizational Levels/ Profiles

Select View(s) Default Setting

# Master Data Navigation (Contd)

- Next screen requires the selection of the plant location.



Use the Plant selection to view the options and then select **DC Miami** from the options and click choose.

Possible Entries: Plants

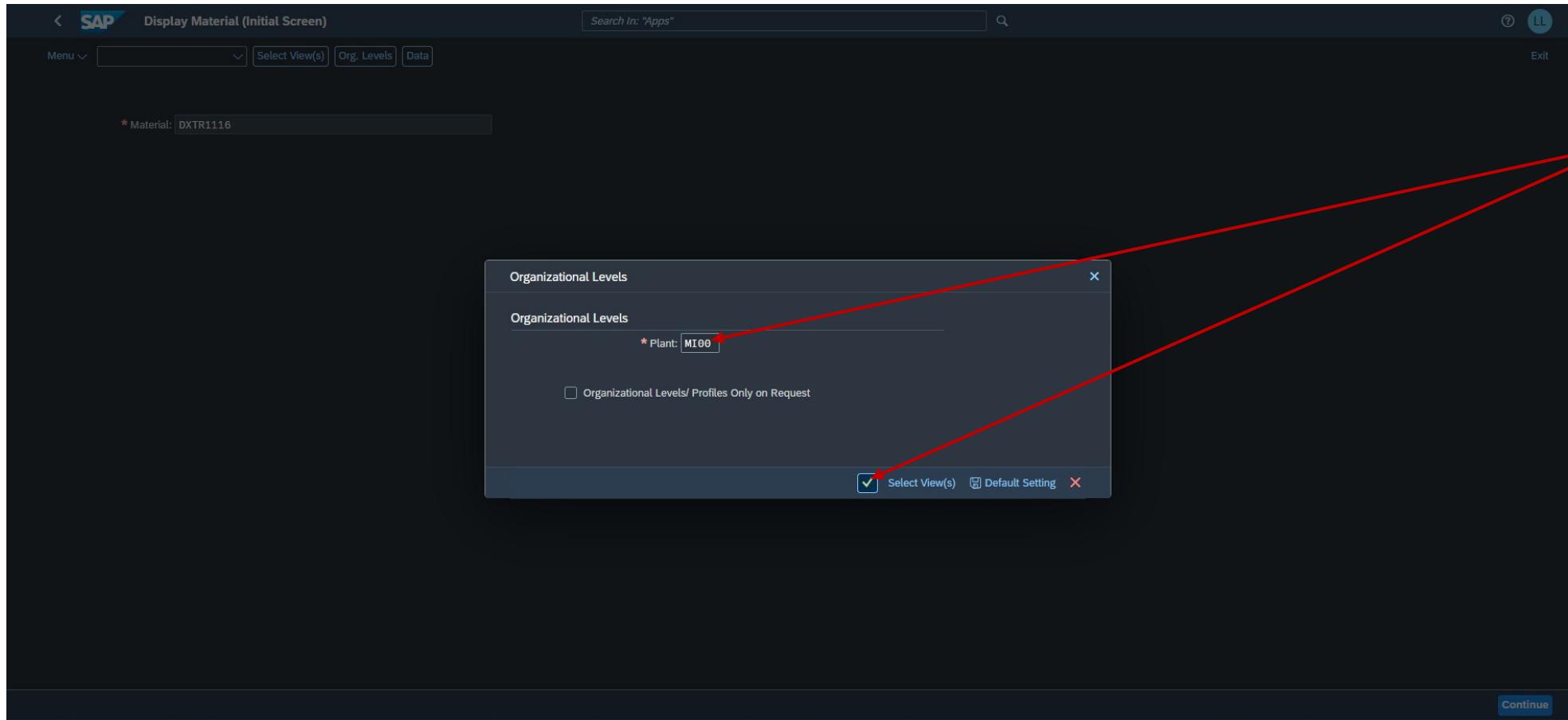
Maint.	Plant	Name 1
X	DL00	Plant Dallas
X	HD00	Plant Heidelberg
X	HH00	DC Hamburg
<b>X</b>	<b>MI00</b>	<b>DC Miami</b>
X	SD00	DC San Diego

Choose Maintenance status Cancel

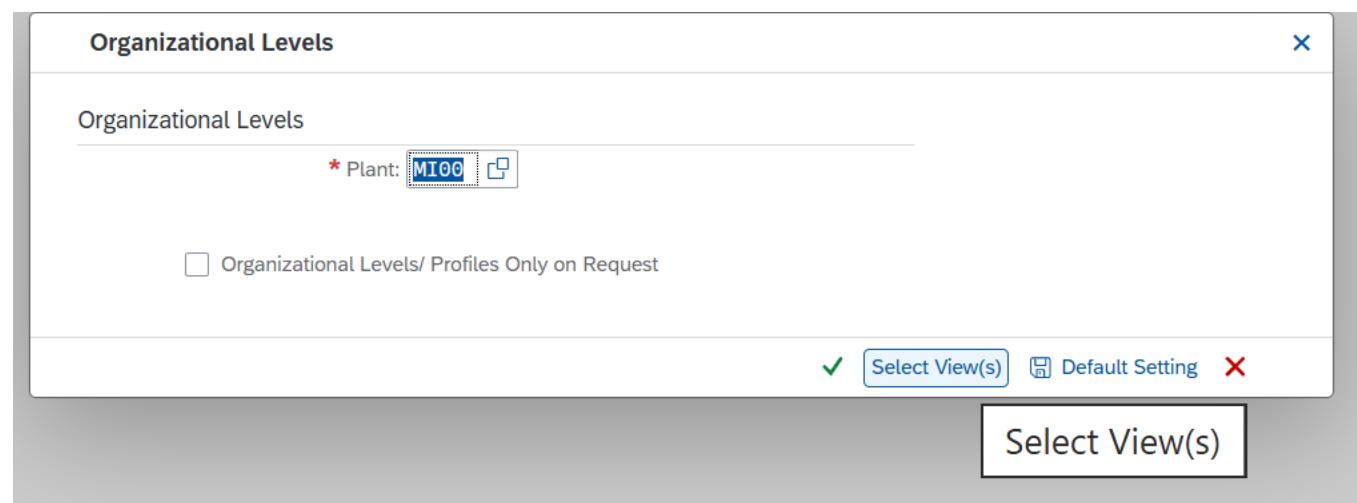
DC Miami to select it. (MI00)

# Master Data Navigation (Contd)

- Location code is displayed, select to view the materials detail.



Location code  
is displayed.  
Click ✓ to  
proceed.



Select View(s)

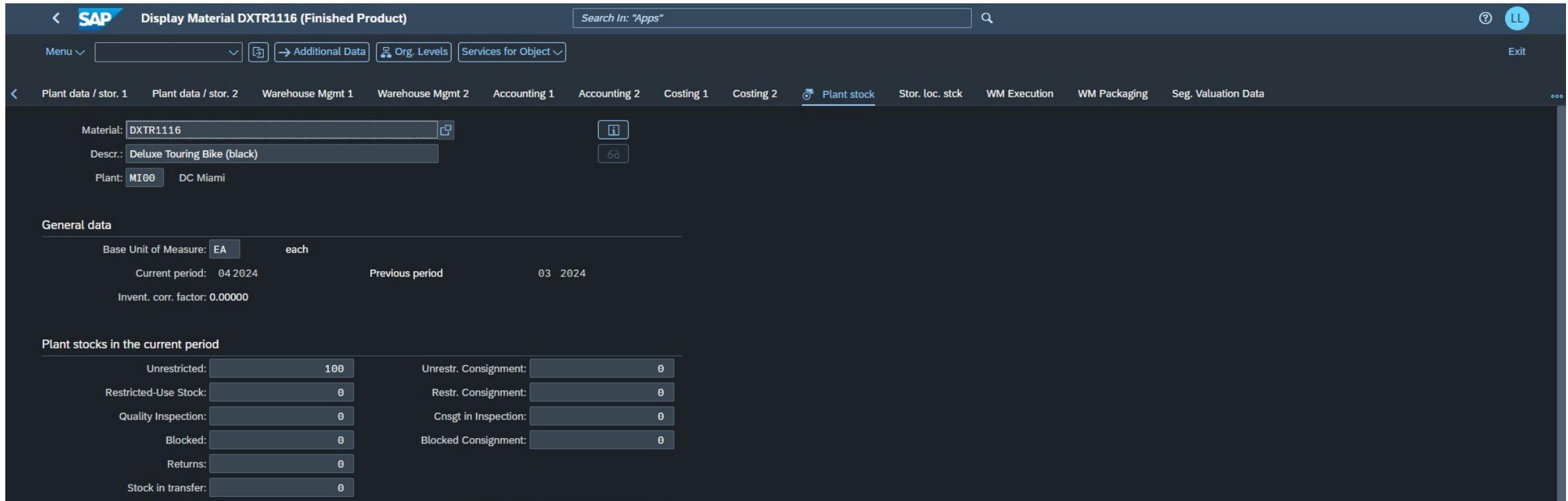
## Master Data Navigation (Contd)

- Location code is displayed, select to view the materials detail.

Click Data to See Material Details

# Master Data Navigation (Contd)

- Plant stock information is displayed.



SAP Display Material DXTR1116 (Finished Product)

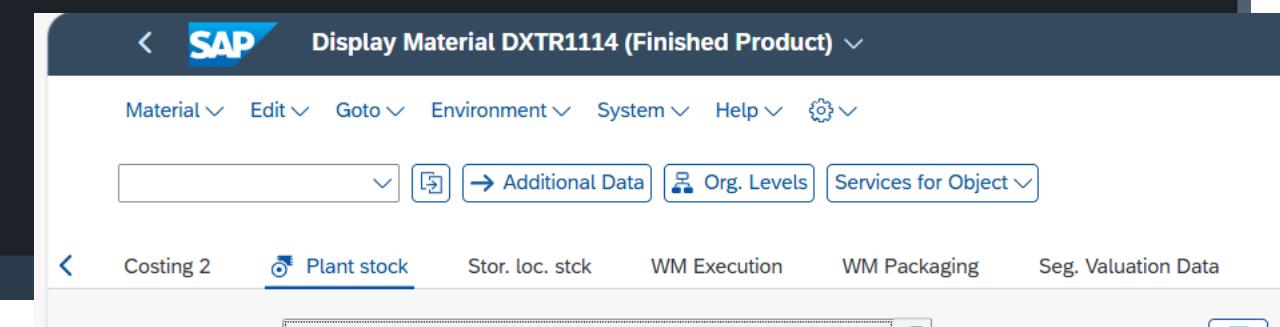
Material: DXTR1116  
 Descr.: Deluxe Touring Bike (black)  
 Plant: MI00 DC Miami

General data

Base Unit of Measure:	EA	each
Current period:	04 2024	Previous period
Invent. corr. factor:	0.00000	

Plant stocks in the current period

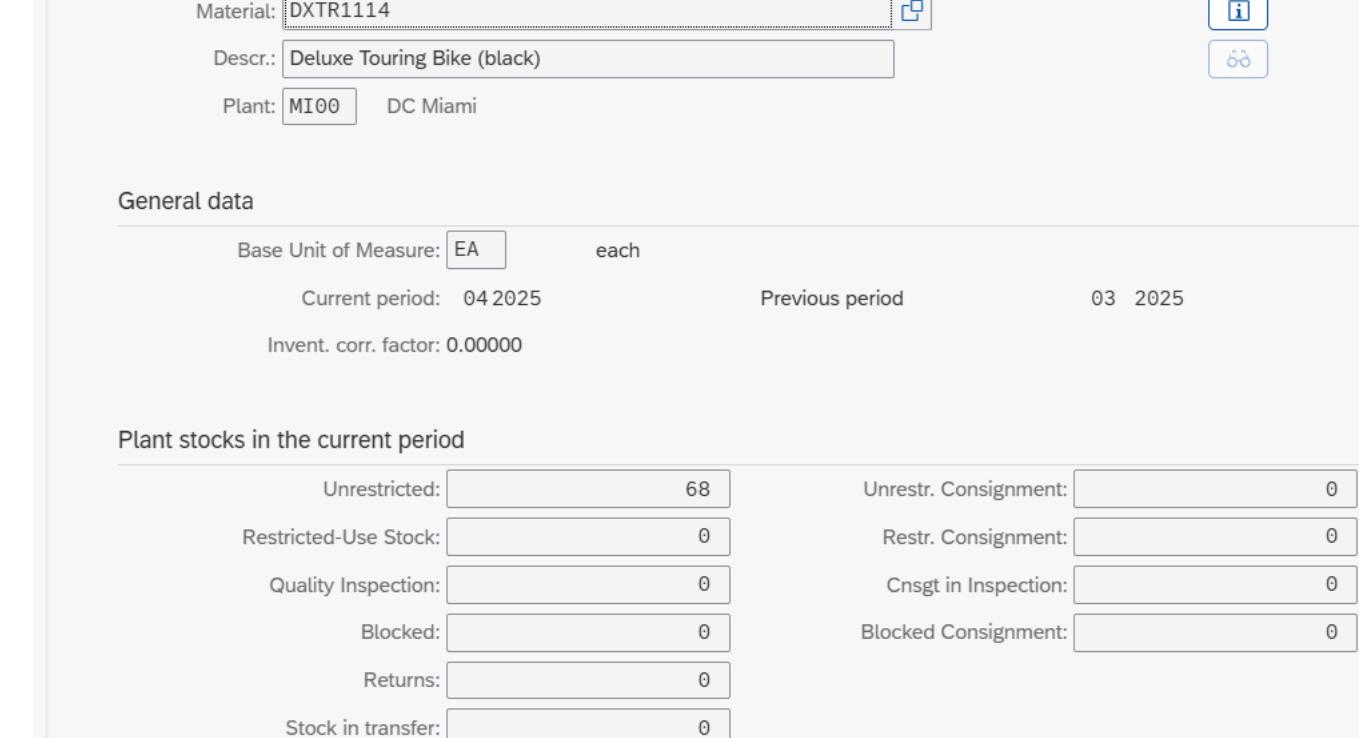
Unrestricted:	100	Unrestr. Consignment:	0
Restricted-Use Stock:	0	Restr. Consignment:	0
Quality Inspection:	0	Cnsgt in Inspection:	0
Blocked:	0	Blocked Consignment:	0
Returns:	0		
Stock in transfer:	0	Stock in Transit:	0
In transfer (plant):	0		



SAP Display Material DXTR1114 (Finished Product)

Material: DXTR1114  
 Descr.: Deluxe Touring Bike (black)  
 Plant: MI00 DC Miami

You will see this



General data

Base Unit of Measure:	EA	each
Current period:	04 2025	Previous period
Invent. corr. factor:	0.00000	

Plant stocks in the current period

Unrestricted:	68	Unrestr. Consignment:	0
Restricted-Use Stock:	0	Restr. Consignment:	0
Quality Inspection:	0	Cnsgt in Inspection:	0
Blocked:	0	Blocked Consignment:	0
Returns:	0		
Stock in transfer:	0		



# Master Data Navigation (Contd)

- We are interested to find the Price & Weight of the Deluxe Touring Bike

The screenshot shows the SAP interface for displaying material data. The material selected is DXTR1116, described as a 'Deluxe Touring Bike (black)' located at plant MI00, DC Miami. The screen displays 'General data' and 'Plant stocks in the current period' sections. In the 'General data' section, the base unit of measure is EA, and the current period is 04 2024. In the 'Plant stocks in the current period' section, there are various stock status categories: Unrestricted (100), Unrestr. Consignment (0), Restr. Consignment (0), Cnsigt in Inspection (0), Blocked (0), Returns (0), Stock in transfer (0), and In transfer (plant) (0). The Stock in Transit field also shows 0.

Hints:  
The **Price** is stored in the **Accounting 1** space.

The **Weight** is stored in the **Basic Data 1** space.

In Accounting 1, scroll down to find standard price

The screenshot shows the SAP interface for displaying material data, specifically for material DXTR1114, described as a 'Deluxe Touring Bike (black)' located at plant MI00, DC Miami. The 'Accounting 1' tab is highlighted with a red box. The screen displays 'General data' and 'Plant stocks in the current period' sections. In the 'General data' section, the base unit of measure is EA, and the current period is 04 2025. In the 'Plant stocks in the current period' section, there are various stock status categories: Unrestricted (68), Unrestr. Consignment (0), Restr. Consignment (0), Cnsigt in Inspection (0), Blocked (0), Returns (0), Stock in transfer (0), and In transfer (plant) (0). The Stock in Transit field also shows 0.

# Master Data Navigation (Contd)

- Accounting 1 Space, for Price data

**Display Material DXTR1116 (Finished Product)**

Material: DXTR1116  
Descr.: Deluxe Touring Bike (black)  
Plant: MI00 DC Miami

Period 004/2024 Period 003/2024 Period 012/2023 Future Costing Run Current Costing Run Prev. CostingRun

**General Valuation Data**

Total Stock: 100 Base Unit: EA each  
Division: BI Valuation Cat.:  
Valuation Class: 7920 Valuated UoM  
VC: Sale Ord. Stk:  Mat. Price Analysis  
Project Stock VC: Price Determ.: 2 Transaction-Based

**Prices and Values**

Currency Type: Company Code Currency  
Ledger: 0L  
Currency: Company Code Currency  
Valuation View: Legal  
Currency Key: USD  
Standard Price: 1,400.00  
Price Unit: 1  
Price Control: S

**Display Material DXTR1114 (Finished Product)**

Material ▾ Edit ▾ Goto ▾ Environment ▾ System ▾ Help ▾

Warehouse Mgmt 1 Warehouse Mgmt 2 Accounting 1 Accounting 2 Costing 1 Costing 2 Plant stock Stor. loc. stck WM Execution > ...

**Currency Key: USD**

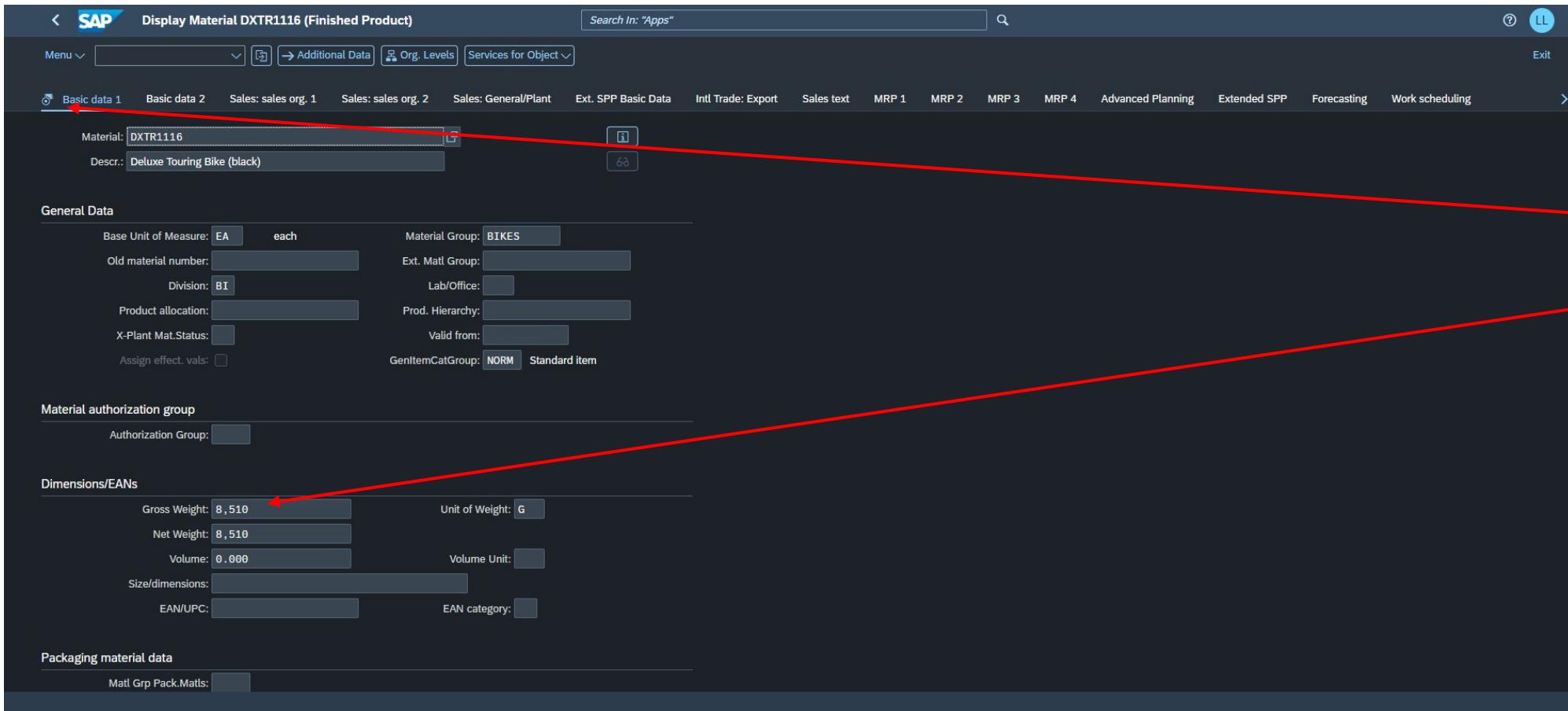
Standard Price: 1,400.00  
Price Unit: 1  
Price Control: S  
Inventory Value: 95,200.00

Future Price: 0.00  
Future Price From:  
Previous Price: 0.00

**Accounting 1 space and Price Data**

# Master Data Navigation (Contd)

## ■ Basic Data 1 Space, for Weight data



SAP Display Material DXTR1116 (Finished Product)

Material: DXTR1116  
Descr.: Deluxe Touring Bike (black)

General Data

Base Unit of Measure: EA	each	Material Group: BIKES
Old material number:		Ext. Matl Group:
Division: BI		Lab/Office:
Product allocation:		Prod. Hierarchy:
X-Plant Mat.Status:		Valid from:
Assign effect. vals:	<input type="checkbox"/>	GentItemCatGroup: NORM Standard item

Material authorization group

Authorization Group:
----------------------

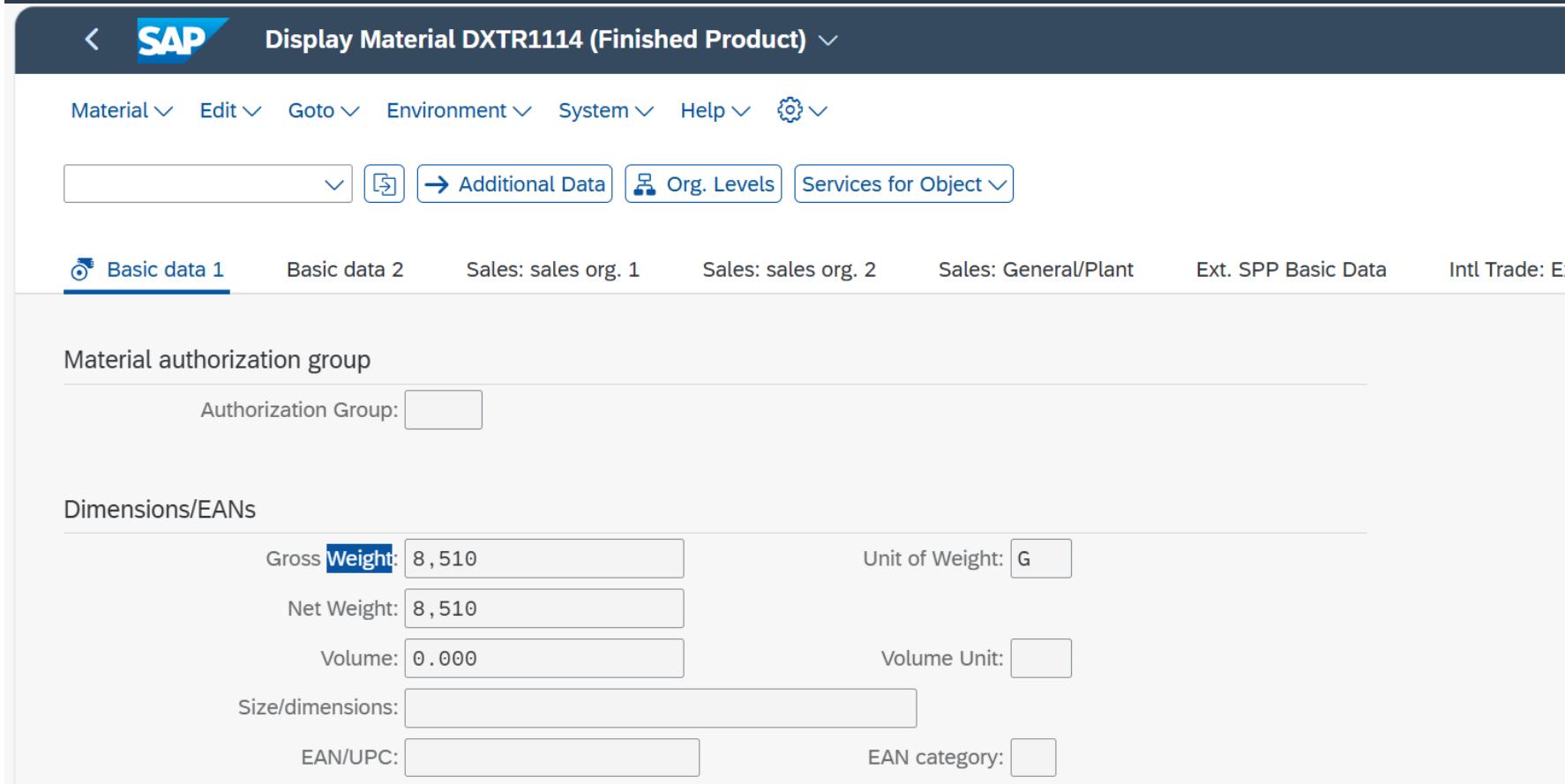
Dimensions/EANs

Gross Weight: 8,510	Unit of Weight: G
Net Weight: 8,510	
Volume: 0.000	Volume Unit:
Size/dimensions:	
EAN/UPC:	EAN category:

Packaging material data

Matl Grp Pack.Mats:
---------------------

Basic Data  
1 space and  
Weight data



SAP Display Material DXTR1114 (Finished Product)

Material ▾ Edit ▾ Goto ▾ Environment ▾ System ▾ Help ▾

Basic data 1 Basic data 2 Sales: sales org. 1 Sales: sales org. 2 Sales: General/Plant Ext. SPP Basic Data Int'l Trade: Ex

Material authorization group

Authorization Group:
----------------------

Dimensions/EANs

Gross Weight: 8,510	Unit of Weight: G
Net Weight: 8,510	
Volume: 0.000	Volume Unit:
Size/dimensions:	
EAN/UPC:	EAN category:

In Basic Data 1, scroll  
down to find Weight



☛ What is the price and weight of the bike?

Price: .....

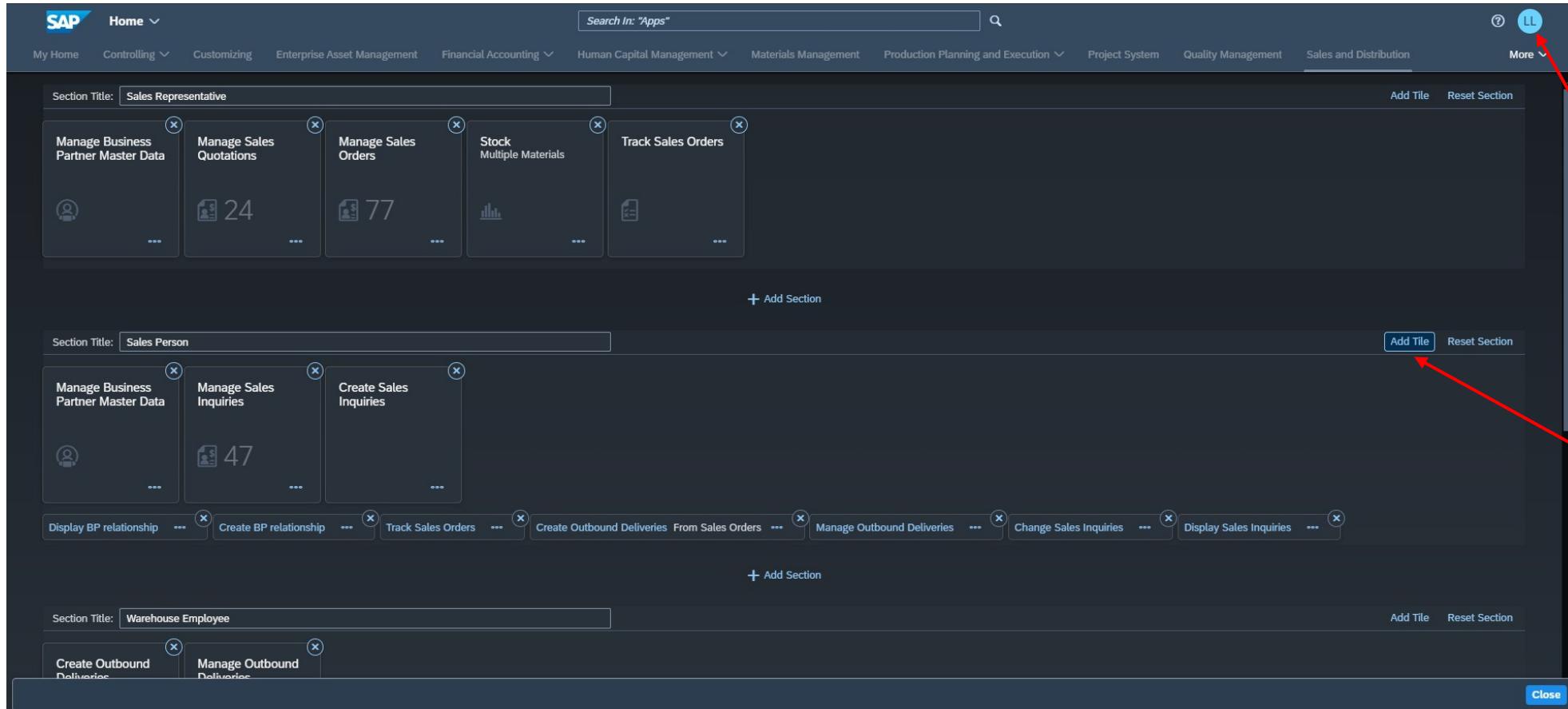
Weight:.....



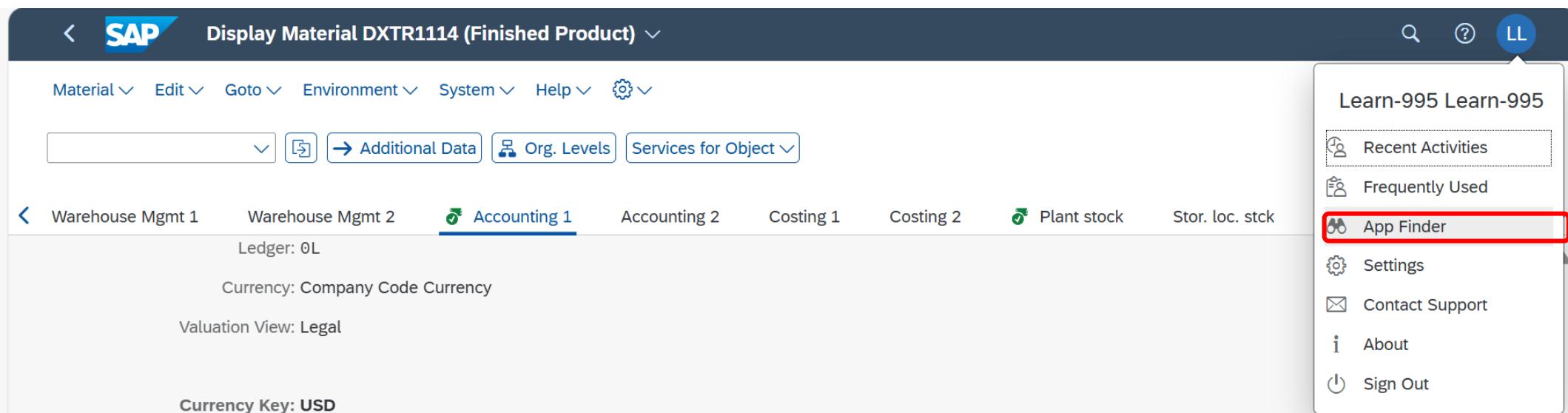
HOLMES  
INSTITUTE

## Understanding Reports in SAP S/4HANA

- The List Sales Order app is not included by default. Add it to the Salesperson Role in the Sales & Distribution Space.



To add the List Sales Order app Click **LL** the profile and select **Edit Current Page**. In the Sales Person role, click on add Tile.



Learn-995 Learn-995

- Recent Activities
- Frequently Used
- App Finder**
- Settings
- Contact Support
- About
- Sign Out



- The List Sales Order app is not included by default. Add it to the Salesperson Role in the Sales & Distribution Space.

The screenshot shows the SAP Fiori Launchpad interface. At the top, there's a navigation bar with links like Home, My Home, Controlling, Customizing, Enterprise Asset Management, Financial Accounting, Human Capital Management, Materials Management, Production Planning and Execution, Project System, Quality Management, and Sales and Distribution. Below the navigation bar are three sections:

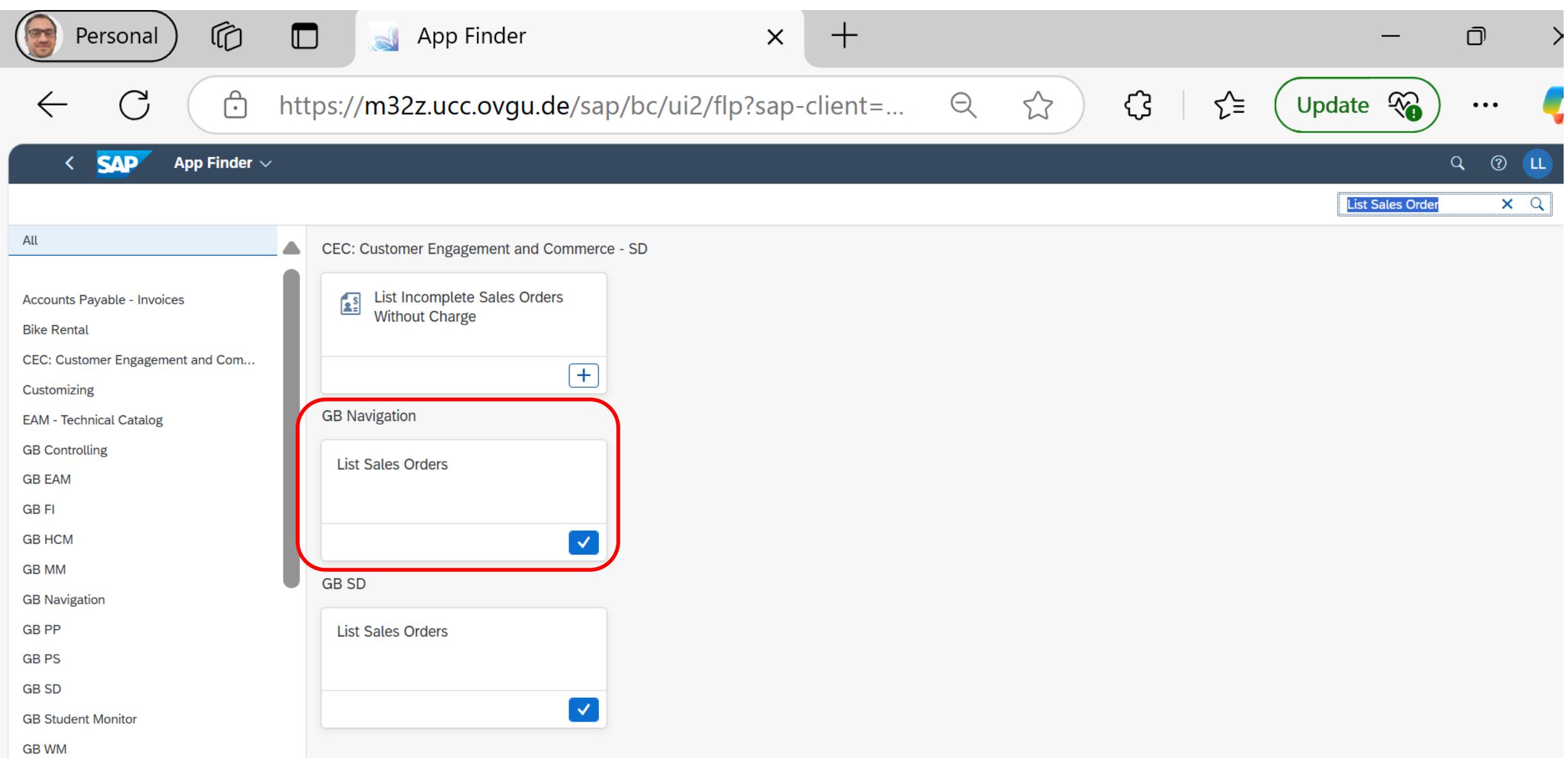
- Sales Representative:** Contains tiles for Manage Business Partner Master Data, Manage Sales Quotations, Manage Sales Orders, Stock Multiple Materials, and Track Sales Orders. There are also buttons for Add Section and More.
- Sales Person:** Contains tiles for Manage Business Partner Master Data, Manage Sales Inquiries, Create Sales Inquiries, and several other buttons like Display BP relationship, Create BP relationship, Track Sales Orders, Create Outbound Deliveries, From Sales Orders, Manage Outbound Deliveries, Change Sales Inquiries, and Display Sales Inquiries. There are also buttons for Add Section and More.
- Warehouse Employee:** Contains tiles for Create Outbound Deliveries and Manage Outbound Deliveries. There is a button for Add Section.

To add the List Sales Order app Click **LL** the profile and select **Edit Current Page**. In the Sales Person role, click on add Tile.

The screenshot shows the SAP App Finder interface. At the top, there's a header with back, forward, and search icons, and a URL bar showing <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. Below the header is a search bar with the text "List Sales Order".

The main area is divided into two columns:

- Left Column (All):** Lists various SAP modules and components: Accounts Payable - Invoices, Bike Rental, CEC: Customer Engagement and Com..., Customizing, EAM - Technical Catalog, GB Controlling, GB EAM, GB FI, GB HCM, GB MM, GB Navigation, GB PP, GB PS, GB SD, GB Student Monitor, and GB WM.
- Right Column (CEC: Customer Engagement and Commerce - SD):** Shows a list of apps under GB SD, with "List Sales Orders" being the only one currently selected (indicated by a checkmark).



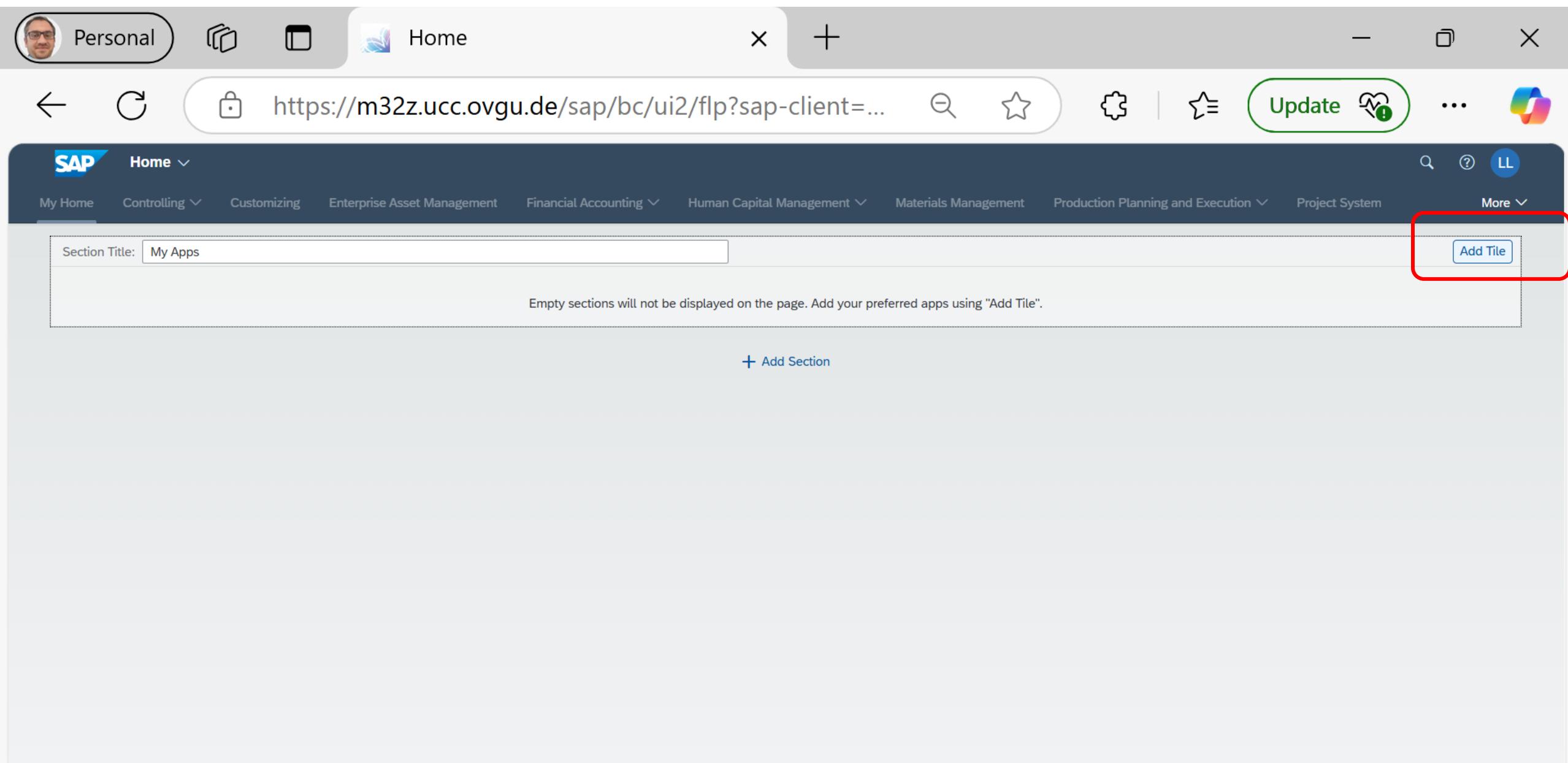
The screenshot shows the SAP Fiori App Finder interface. The top navigation bar includes a user profile icon, 'Personal' (highlighted in orange), 'App Finder' (highlighted in blue), and a search bar with the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. The main content area displays a list of applications under the heading 'All'. On the left is a sidebar with various system modules like Accounts Payable - Invoices, Bike Rental, CEC, Customizing, EAM, etc. The central area shows three application cards:

- CEC: Customer Engagement and Commerce - SD**: Contains the card "List Incomplete Sales Orders Without Charge" with a plus sign (+) button.
- GB Navigation**: Contains the card "List Sales Orders" with a checkmark (✓) button. This card is highlighted with a red rectangular border.
- GB SD**: Contains the card "List Sales Orders" with a checkmark (✓) button.

A search bar at the bottom right contains the text "List Sales Order".

# SAP S/4HANA Reports

The screenshot shows a web browser window with an SAP Fiori Launchpad interface. The top navigation bar includes a user profile icon, 'Personal' link, file icons, and a 'Home' button with a blue flower icon. The address bar displays the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. The main content area features the SAP logo and a 'Home' dropdown menu. Below this are navigation links for 'My Home', 'Controlling', 'Customizing', 'Enterprise Asset Management', 'Financial Accounting', 'Human Capital Management', 'Materials Management', 'Production Planning and Execution', and 'More'. The central part of the screen displays a placeholder image of a tent under clouds with the text 'Nothing here yet? You can add your preferred apps to this page.' A red box highlights the 'Edit Page' button at the bottom.



Personal Home

https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...

SAP Home

My Home Controlling Customizing Enterprise Asset Management Financial Accounting Human Capital Management Materials Management Production Planning and Execution Project System More

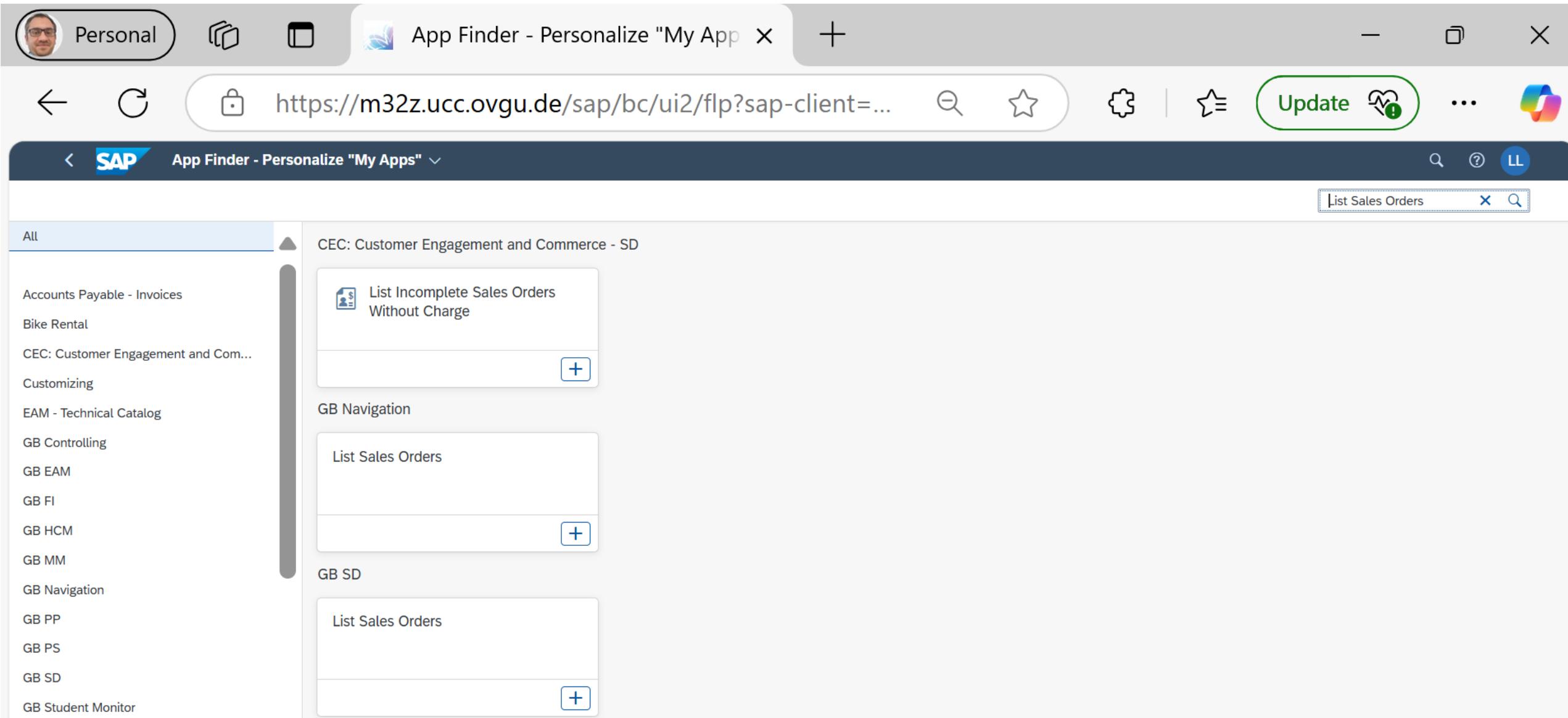
Section Title: My Apps

Add Tile

Empty sections will not be displayed on the page. Add your preferred apps using "Add Tile".

+ Add Section

Use the **search bar** and type: List Sales Orders

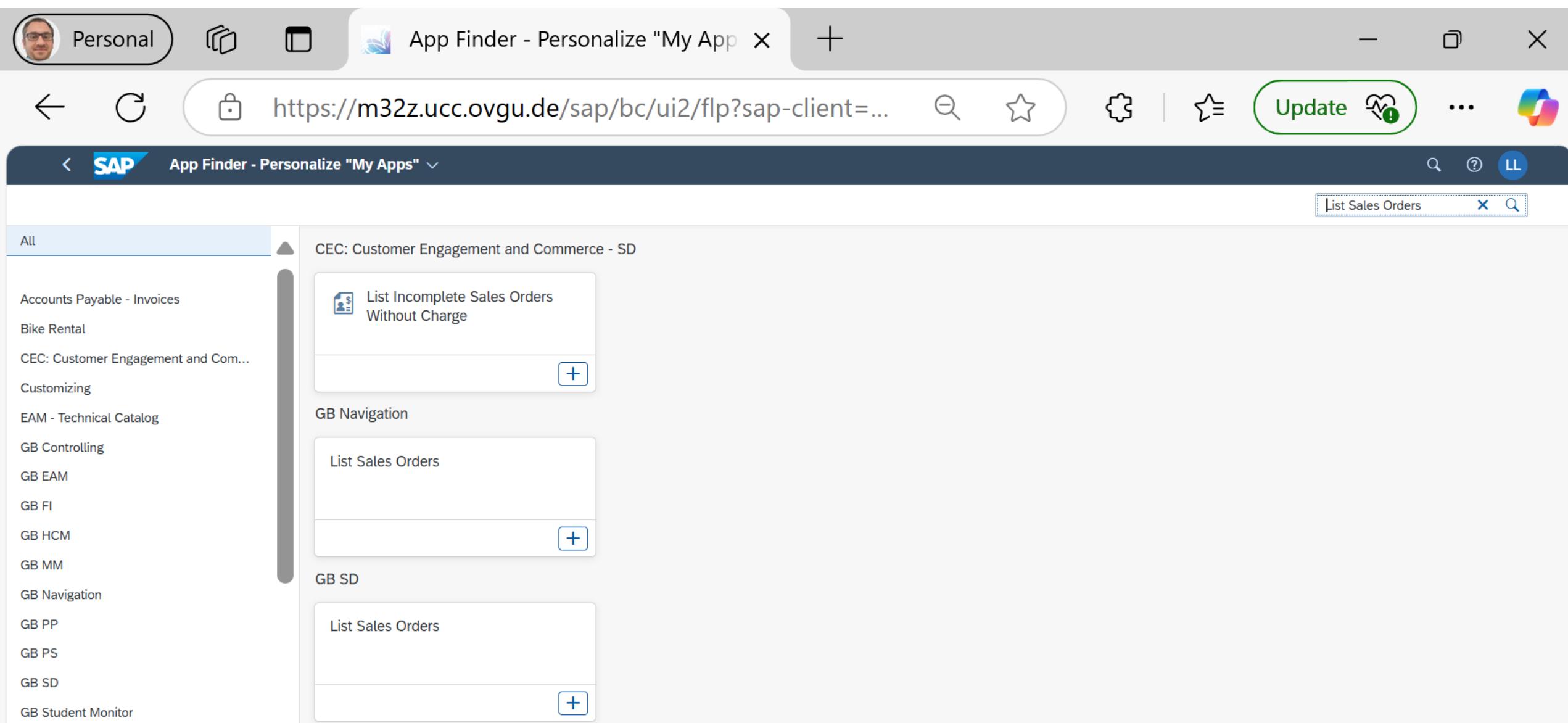


The screenshot shows the SAP App Finder - Personalize "My Apps" interface. At the top, there is a search bar with the text "List Sales Orders". Below the search bar, there is a list of applications and their sub-applications:

- All
  - Accounts Payable - Invoices
  - Bike Rental
  - CEC: Customer Engagement and Com...
  - Customizing
  - EAM - Technical Catalog
  - GB Controlling
  - GB EAM
  - GB FI
  - GB HCM
  - GB MM
  - GB Navigation
  - GB PP
  - GB PS
  - GB SD
  - GB Student Monitor
- CEC: Customer Engagement and Commerce - SD
  - List Incomplete Sales Orders Without Charge
- GB Navigation
  - List Sales Orders
- GB SD
  - List Sales Orders

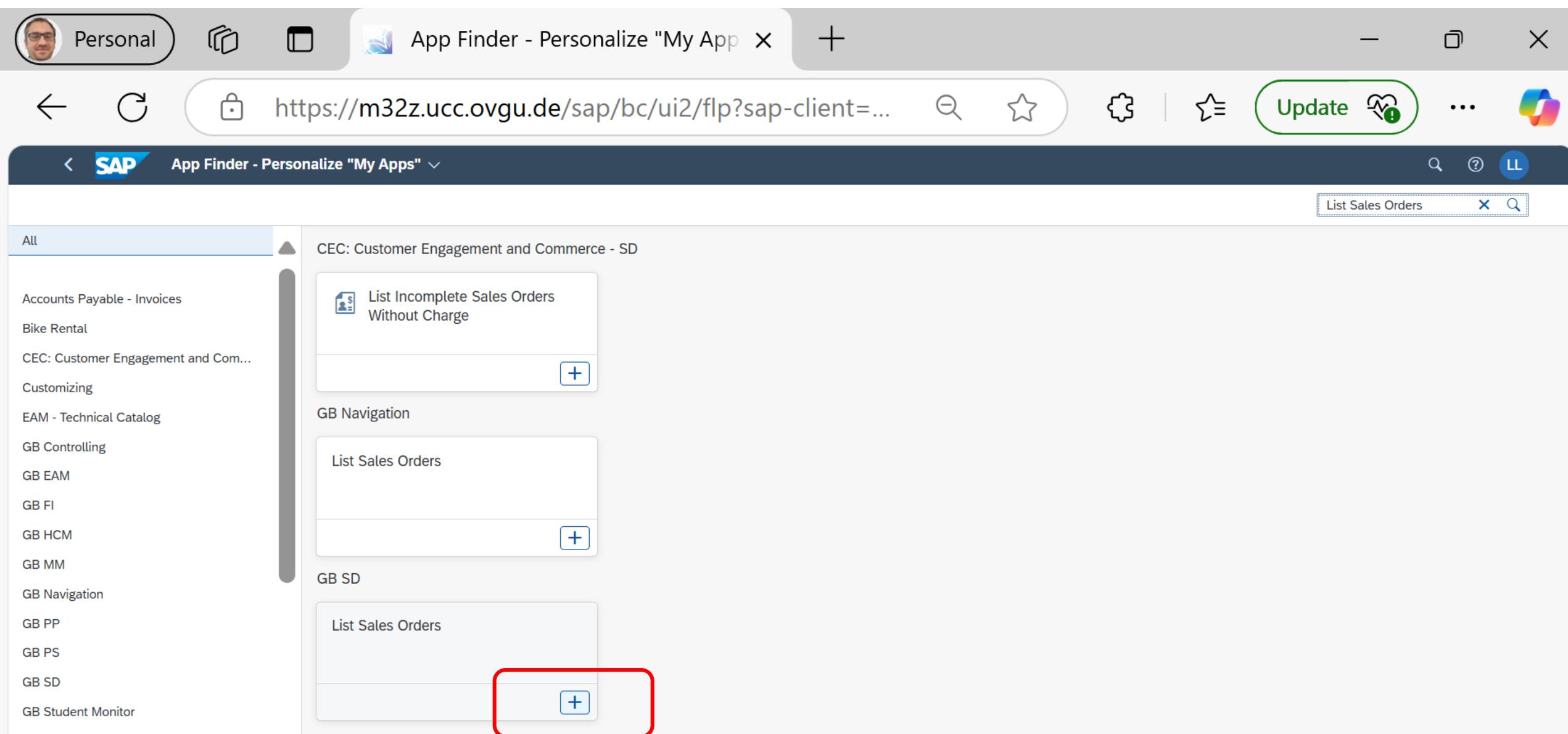
You should see multiple results, likely under:

- GB Navigation
- GB SD



The screenshot shows the SAP App Finder interface. The top navigation bar includes a user profile icon, 'Personal' button, file icons, and a tab labeled 'App Finder - Personalize "My App"'. The address bar displays the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. The main content area has a dark blue header with the SAP logo and 'App Finder - Personalize "My Apps"' text. A search bar at the top right contains the text 'List Sales Orders'. On the left, a sidebar lists various SAP modules: Accounts Payable - Invoices, Bike Rental, CEC: Customer Engagement and Com..., Customizing, EAM - Technical Catalog, GB Controlling, GB EAM, GB FI, GB HCM, GB MM, GB Navigation, GB PP, GB PS, GB SD, and GB Student Monitor. The main panel displays three results under the heading 'CEC: Customer Engagement and Commerce - SD': 'List Incomplete Sales Orders Without Charge' (with a '+' button), 'List Sales Orders' (under 'GB Navigation' with a '+ button), and 'List Sales Orders' (under 'GB SD' with a '+ button).

Click on +



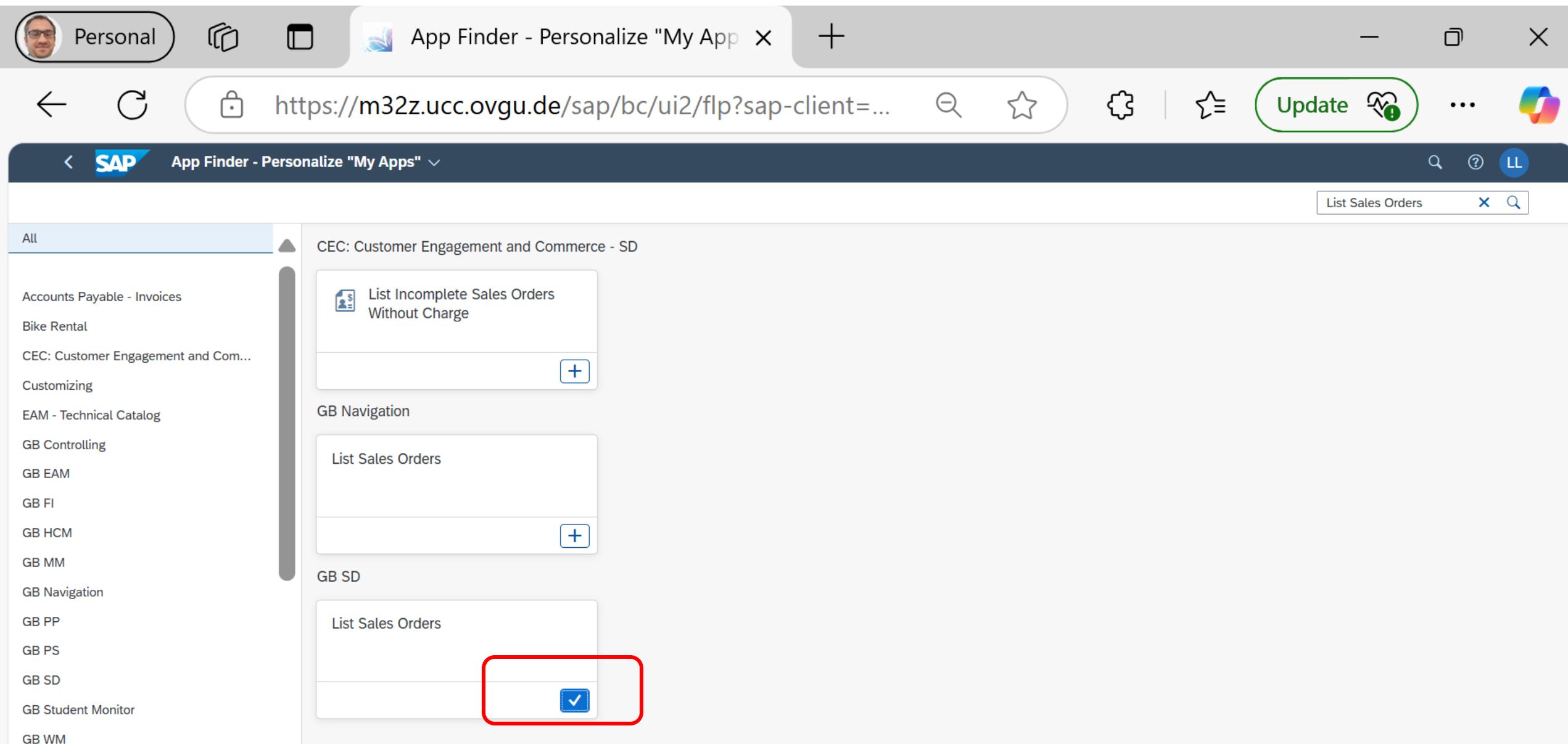
The screenshot shows the SAP Fiori Launchpad interface. At the top, there's a header bar with a user profile icon, 'Personal', and other navigation icons. The main title is 'App Finder - Personalize "My App"'. Below the header is a browser-style address bar with the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=100>. To the right of the address bar are search, star, and update buttons.

The main content area is titled 'App Finder - Personalize "My Apps"'. On the left, there's a sidebar with a list of applications: Accounts Payable - Invoices, Bike Rental, CEC: Customer Engagement and Com..., Customizing, EAM - Technical Catalog, GB Controlling, GB EAM, GB FI, GB HCM, GB MM, GB Navigation, GB PP, GB PS, GB SD, GB Student Monitor, and others. The 'All' tab is selected in the sidebar.

The main panel displays several application cards:

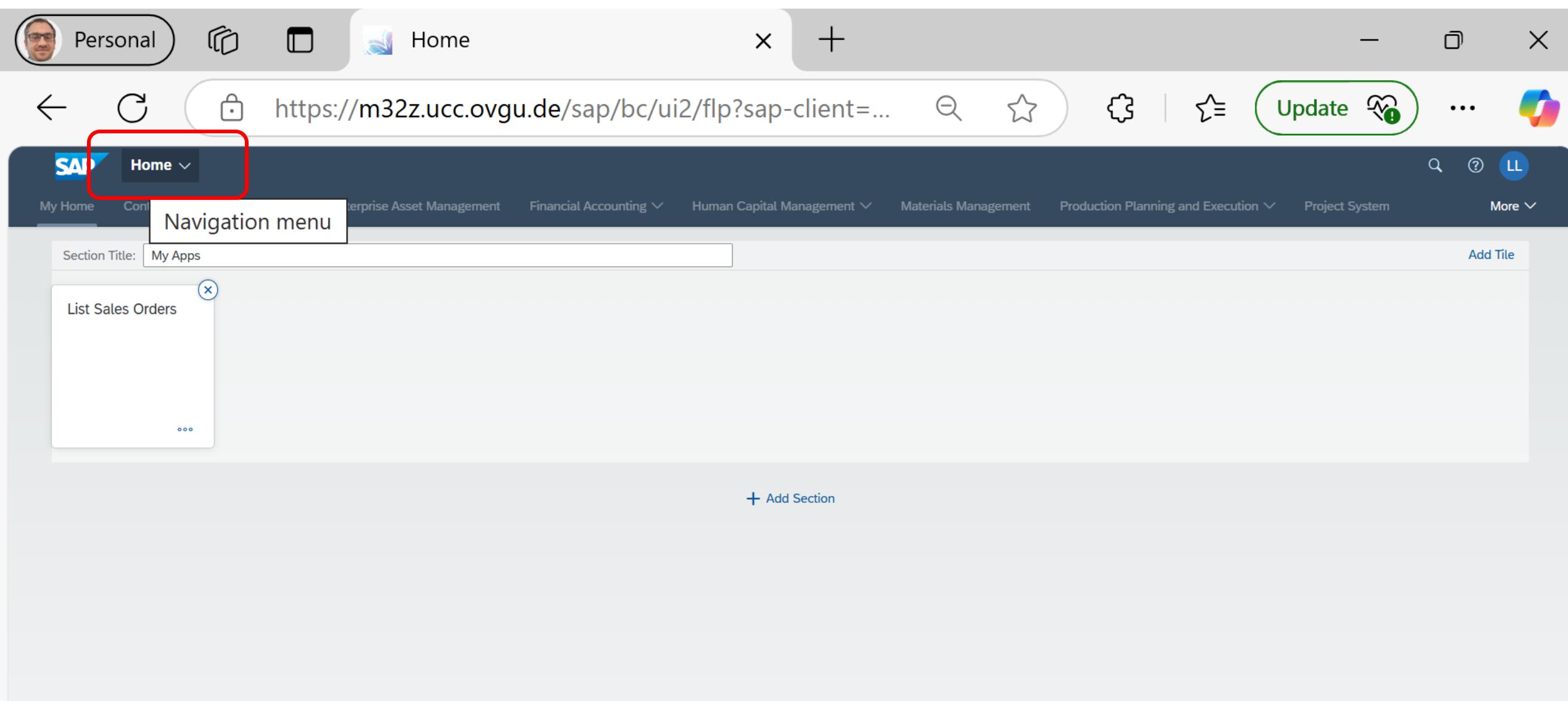
- CEC: Customer Engagement and Commerce - SD**: Contains a card for 'List Incomplete Sales Orders Without Charge' with a '+' button.
- GB Navigation**: Contains a card for 'List Sales Orders' with a '+' button.
- GB SD**: Contains a card for 'List Sales Orders' with a '+' button, which is highlighted with a red rectangle.

Click “Home” to return to Home screen edit mode.



The screenshot shows the SAP Fiori App Finder interface. The top navigation bar includes a user profile icon, "Personal" (highlighted in orange), a folder icon, a document icon, a search icon, a star icon, a gear icon, a favorite icon, an "Update" button with a heart icon, and a three-dot menu. The URL in the address bar is <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. The main content area displays the "App Finder - Personalize "My Apps"" screen. On the left, a sidebar lists various SAP modules: Accounts Payable - Invoices, Bike Rental, CEC: Customer Engagement and Com..., Customizing, EAM - Technical Catalog, GB Controlling, GB EAM, GB FI, GB HCM, GB MM, GB Navigation, GB PP, GB PS, GB SD, GB Student Monitor, and GB WM. The central area shows three groups of apps under "CEC: Customer Engagement and Commerce - SD": "List Incomplete Sales Orders Without Charge" (with a plus icon), "List Sales Orders" (under GB Navigation, with a plus icon), and "List Sales Orders" (under GB SD, with a checked checkbox highlighted by a red rectangle). A search bar at the top right contains the text "List Sales Orders".

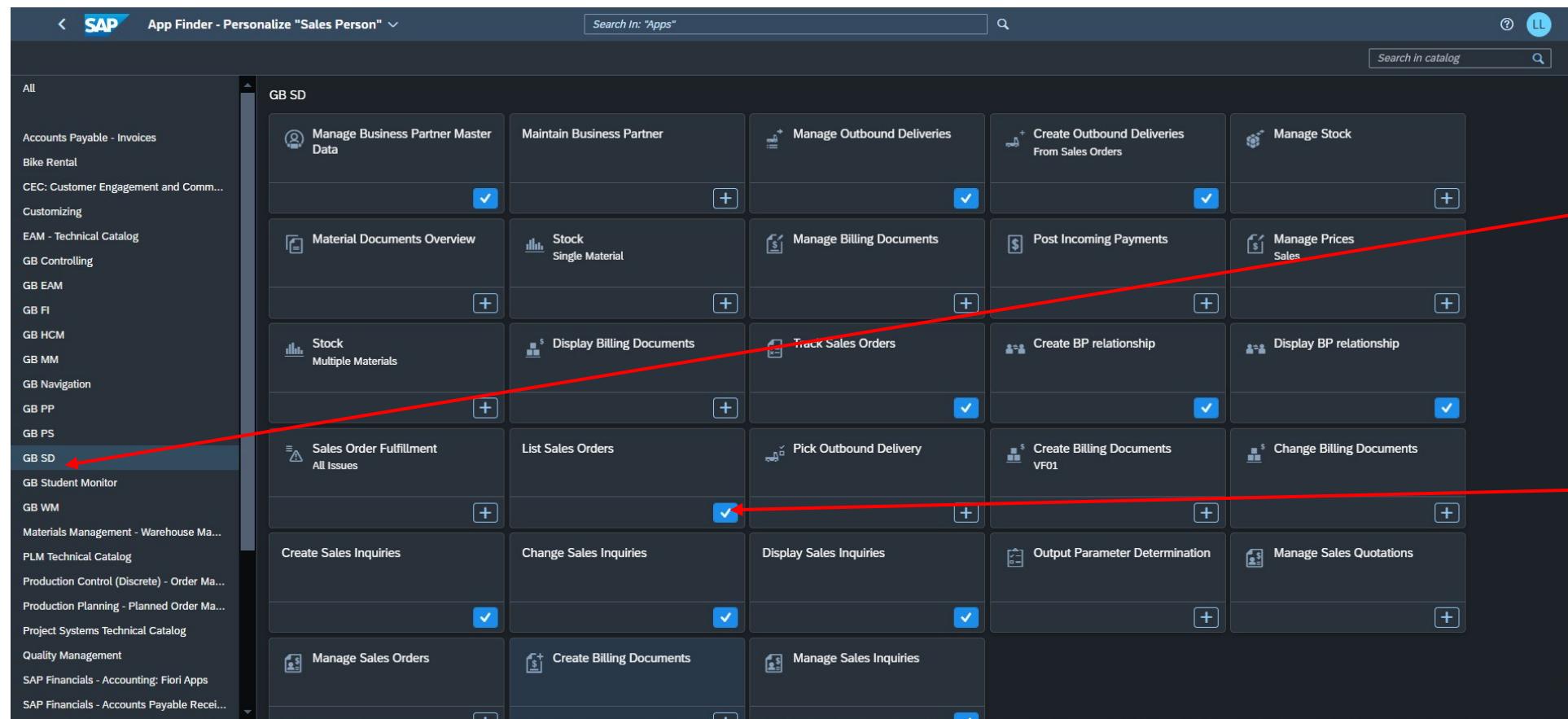
Click “Home” to return to Home screen edit mode.



The screenshot shows the SAP S/4HANA Home screen in edit mode. At the top, there is a browser-like header with a user profile icon, 'Personal' button, file icons, a 'Home' button (which is currently active and highlighted in blue), a close button ('X'), and a '+' button. Below this is the SAP logo and a 'Home' dropdown menu. The main content area has a dark blue header bar with various system navigation links like 'Enterprise Asset Management', 'Financial Accounting', etc. A 'Navigation menu' section is visible, containing a 'My Apps' section titled 'List Sales Orders'. A red box highlights the 'Home' button in the top header. A green oval highlights the 'Update' button in the top right corner of the browser header. The bottom of the screen shows a large white area with a '+ Add Section' button.

# SAP S/4HANA Reports

- Add the List Sales Order App to the SAP Sales and Distribution Space.

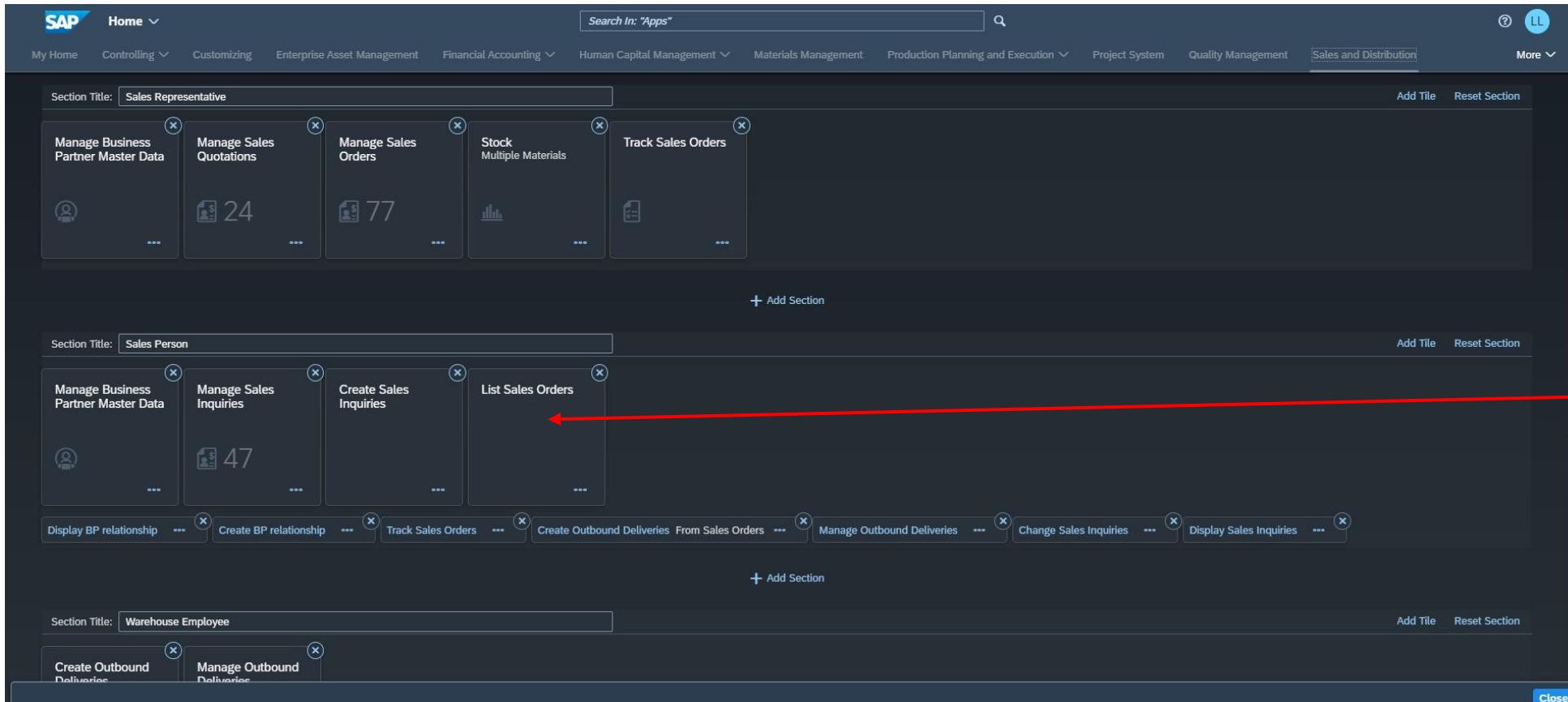


The screenshot shows the SAP App Finder interface for personalizing apps under the "Sales Person" role. On the left, a sidebar lists various SAP modules and spaces, with "GB SD" highlighted. The main area displays a grid of apps categorized under "GB SD". One specific app, "List Sales Orders", is highlighted with a red arrow and a checked checkbox, indicating it has been selected or is being added.

Select the **GB SD** (Global Bikes Sales & Distribution) from the left pane and click on the + for List Sales Order app. Notice + changes to ✓.

Return to the **Sales and Distribution Space**.

- The List Sales Order app is now included in the Salesperson Role in the Sales & Distribution Space.



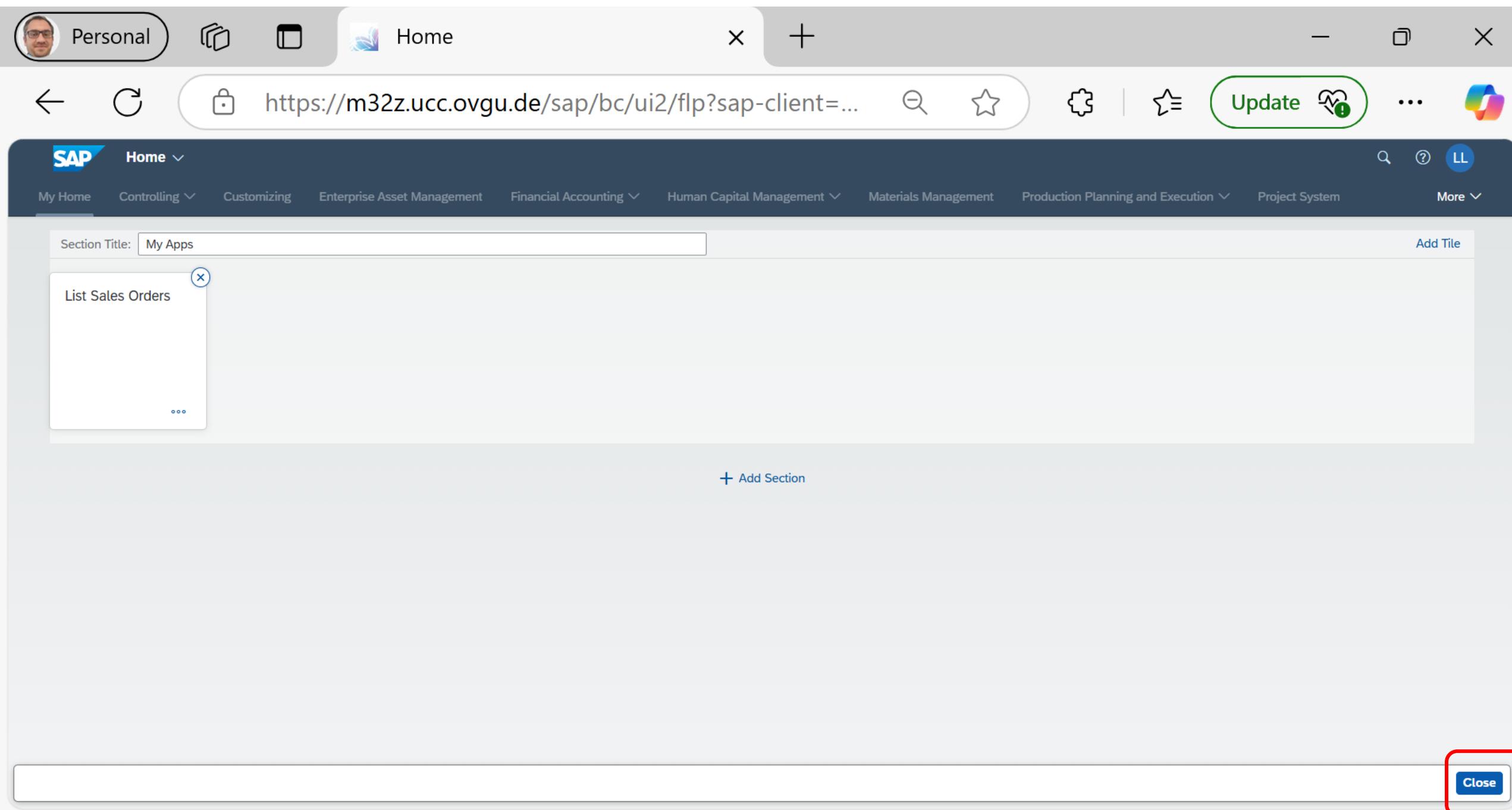
The screenshot shows the SAP Fiori Launchpad interface. At the top, there's a navigation bar with links like Home, Controlling, Customizing, Enterprise Asset Management, Financial Accounting, Human Capital Management, Materials Management, Production Planning and Execution, Project System, Quality Management, and Sales and Distribution (which is highlighted). Below the navigation bar are three sections of tiles:

- Sales Representative Section:** Contains tiles for Manage Business Partner Master Data (24 items), Manage Sales Quotations (77 items), Manage Sales Orders, Stock Multiple Materials, and Track Sales Orders.
- Sales Person Section:** Contains tiles for Manage Business Partner Master Data (47 items), Manage Sales Inquiries, Create Sales Inquiries, and List Sales Orders. A red arrow points from the text on the right to the List Sales Orders tile in this section.
- Warehouse Employee Section:** Contains tiles for Create Outbound Deliveries and Manage Outbound Deliveries.

At the bottom of each section, there are "Add Section" and "Reset Section" buttons. The "Sales Person" section also has a "Close" button at the bottom right.

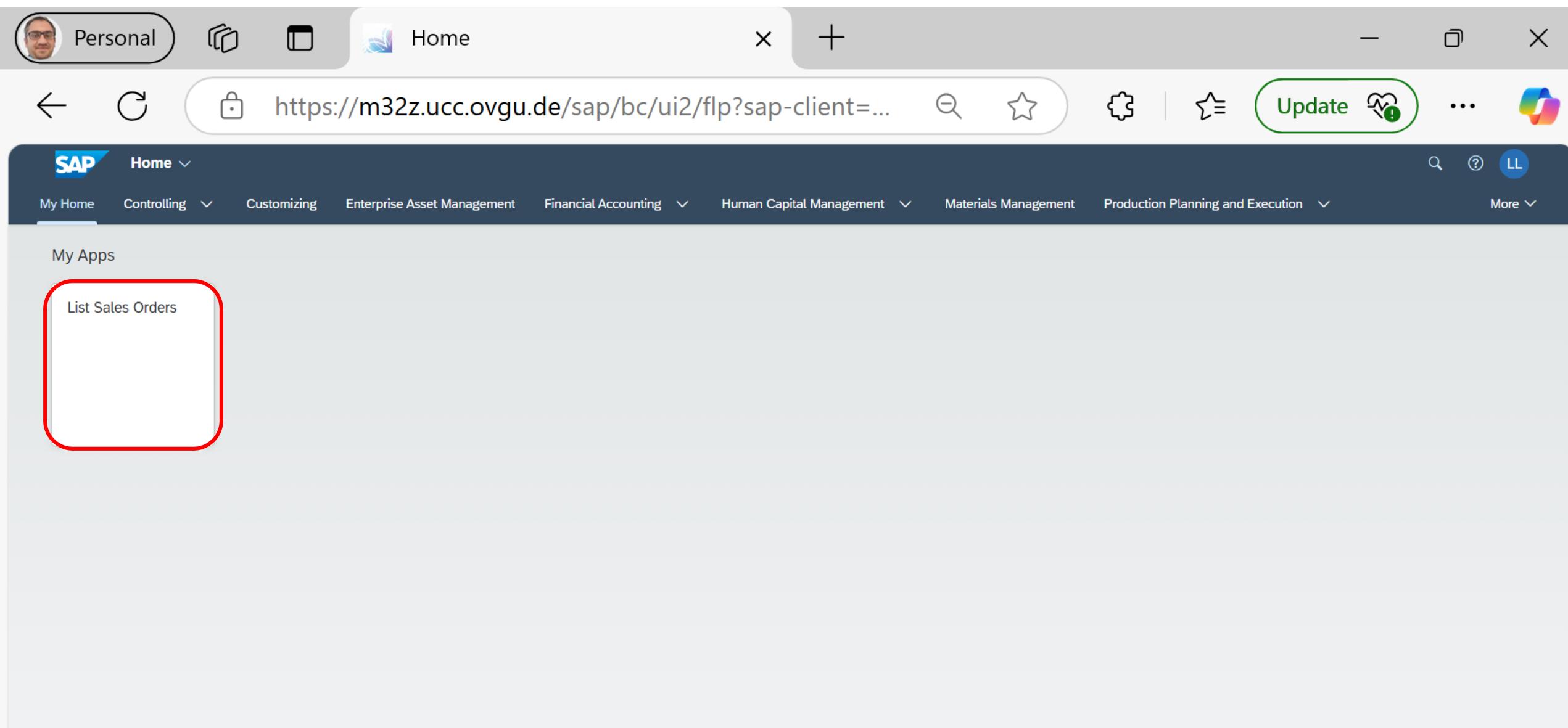
The List Sales Order App is added in the Sales Person Role

Click “Close”



The screenshot shows the SAP Fiori Launchpad interface. At the top, there is a browser-like header with a user profile icon, a "Personal" button, a "Home" button, and a search bar containing the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. Below the header is the SAP logo and a "Home" dropdown menu. The main content area has a dark blue header with various navigation links: My Home, Controlling, Customizing, Enterprise Asset Management, Financial Accounting, Human Capital Management, Materials Management, Production Planning and Execution, Project System, and More. Underneath this is a section titled "Section Title: My Apps". Inside this section, there is a single tile titled "List Sales Orders" with a small "X" icon in the top right corner. At the bottom of the "My Apps" section, there is a link "+ Add Section". In the bottom right corner of the entire page, there is a red-outlined "Close" button.

- Choose it to display this report



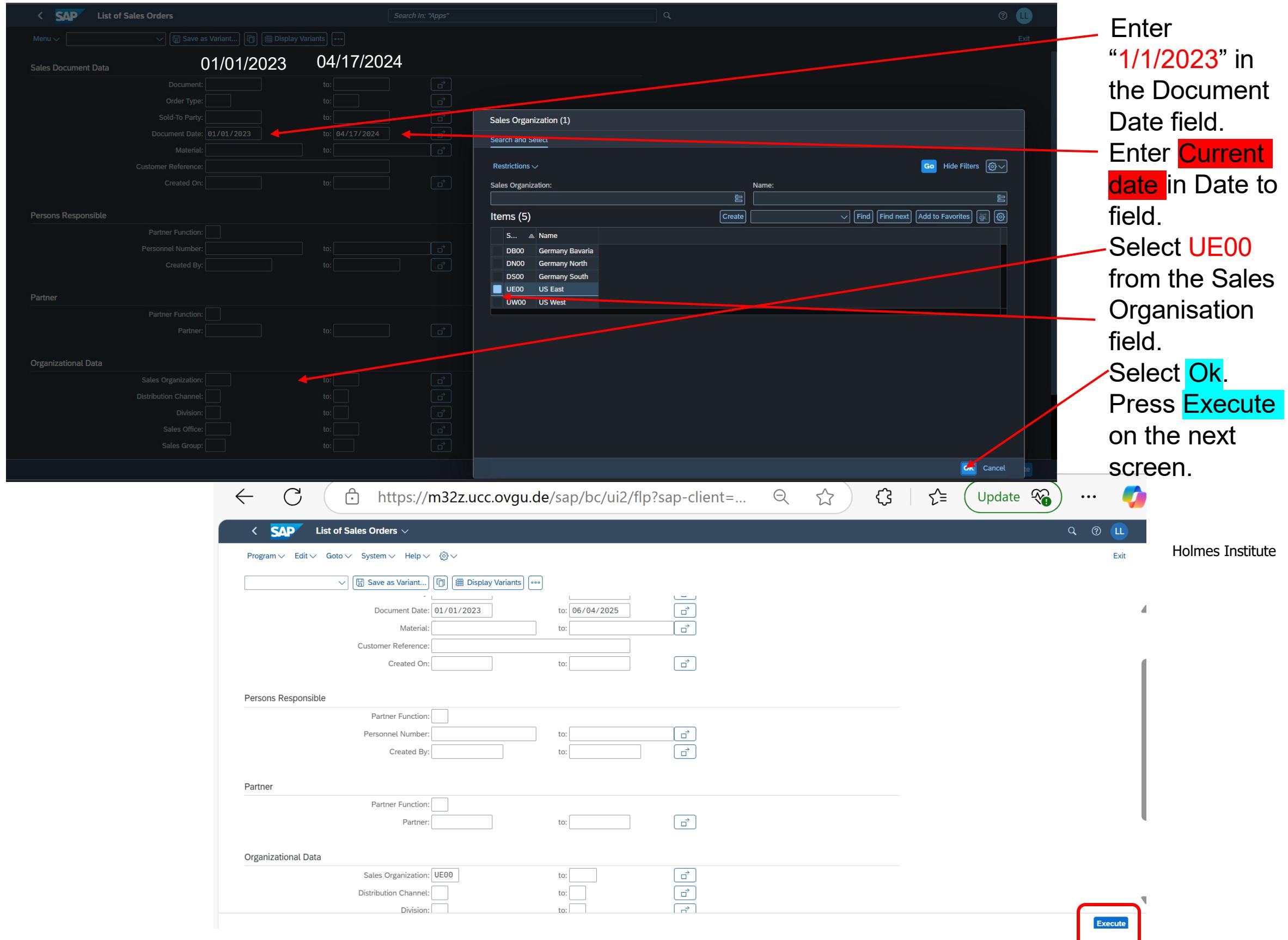
The screenshot shows the SAP S/4HANA Home screen. At the top, there is a browser-like header with a user profile icon, 'Personal', a folder icon, a search icon, and a home icon. The URL bar displays the address <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. To the right of the URL bar are icons for search, star, settings, and update, with the 'Update' button highlighted in green.

The main navigation bar below the header includes the SAP logo, a 'Home' dropdown, and links for 'My Home', 'Controlling', 'Customizing', 'Enterprise Asset Management', 'Financial Accounting', 'Human Capital Management', 'Materials Management', 'Production Planning and Execution', and 'More'.

The 'My Apps' section contains a list of reports. One item, 'List Sales Orders', is circled with a red box.

# SAP S/4HANA Reports

- We need to run a report for all sales from “1/1/2023” till today for the Eastern United States (UE00).



The screenshot shows the SAP S/4HANA List of Sales Orders interface. A modal dialog for selecting a Sales Organization is open. Red arrows and annotations provide instructions for filling out the form:

- Enter “1/1/2023” in the Document Date field.
- Enter Current date in Date to field.
- Select UE00 from the Sales Organisation field.
- Select Ok. Press Execute on the next screen.

The browser address bar shows the URL: <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>

The SAP header includes the Holmes Institute logo and name.

The main form fields include:

- Sales Document Data: Document Date (01/01/2023), Material, Customer Reference, Created On.
- Persons Responsible: Partner Function, Personnel Number, Created By.
- Partner: Partner Function, Partner.
- Organizational Data: Sales Organization (set to UE00), Distribution Channel, Division, Sales Office, Sales Group.

The modal dialog shows the Sales Organization selection screen with the following data:

S...	Name
DB00	Germany Bavaria
DN00	Germany North
DS00	Germany South
<b>UE00</b>	<b>US East</b>
UW00	US West

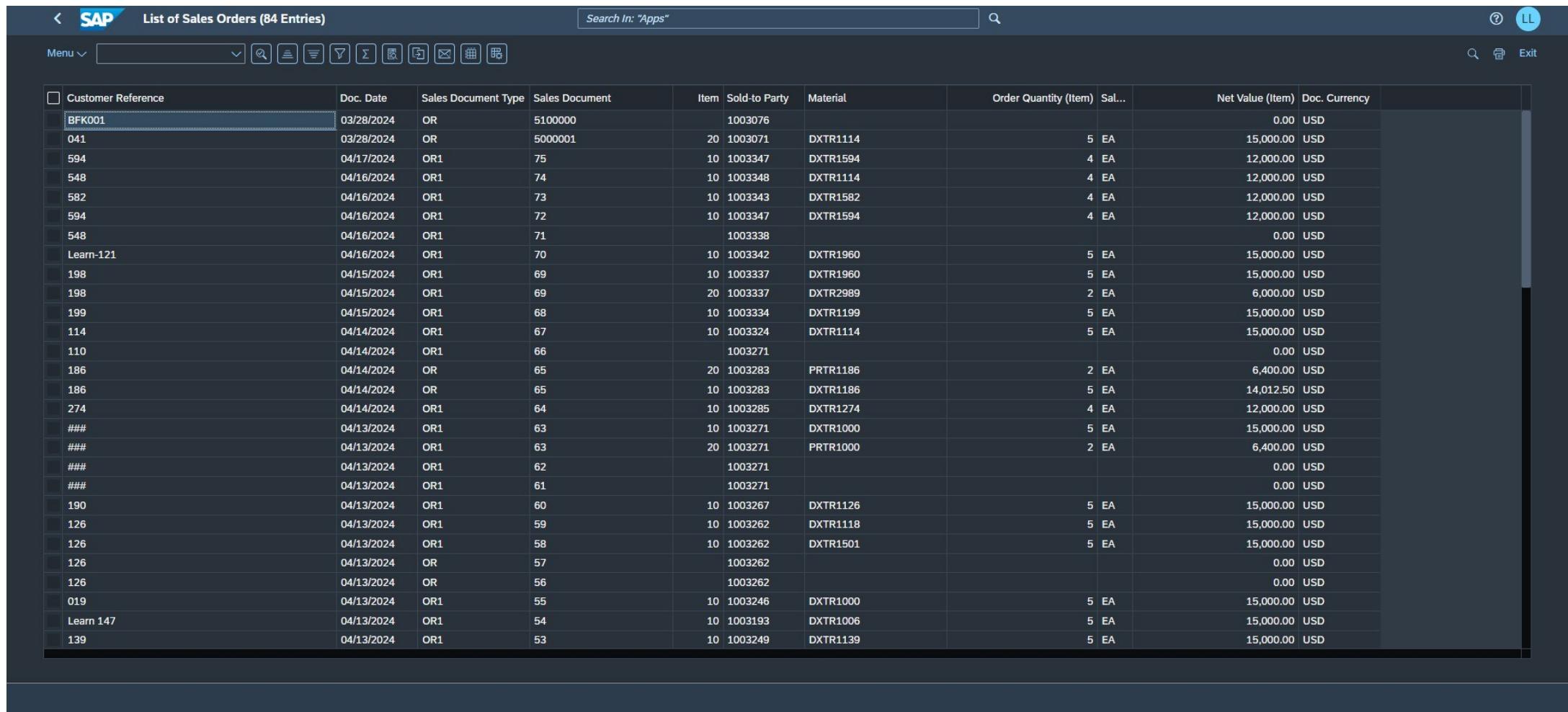
The "Ok" button in the modal is highlighted with a red box.

The "Execute" button at the bottom right of the main screen is also highlighted with a red box.

# SAP S/4HANA Reports

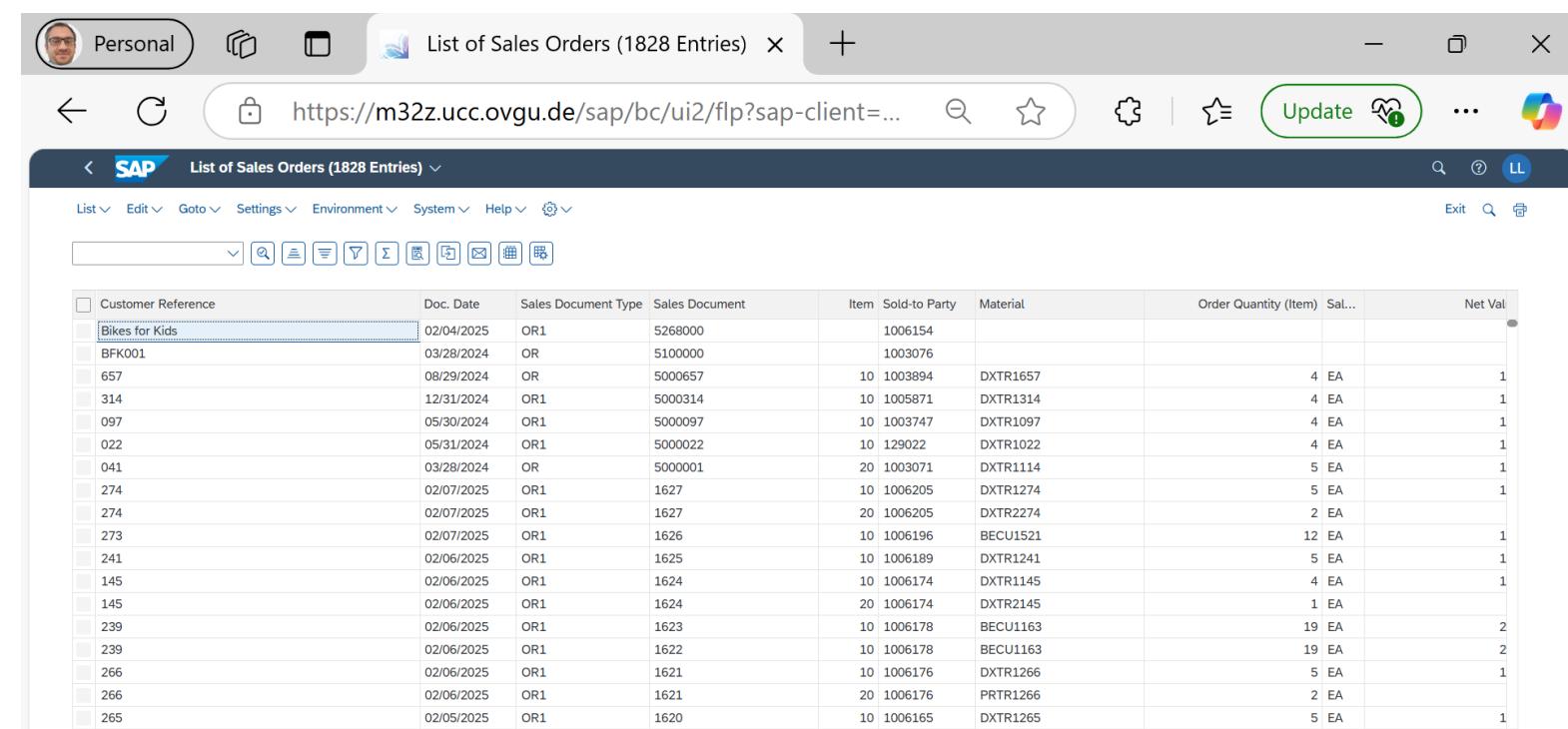
- The Sales Order report is displayed.

SAP List of Sales Orders (84 Entries)



This screenshot shows a SAP S/4HANA sales order report titled "List of Sales Orders (84 Entries)". The report displays various sales documents, their details, and associated materials. Key columns include Customer Reference, Doc. Date, Sales Document Type, Sales Document, Item, Sold-to Party, Material, Order Quantity (Item), Sales Unit, Net Value (Item), Doc. Currency, and Sal... (partially visible). The data includes entries for multiple customers like BFK001, 041, 594, 548, 582, 594, 548, Learn-121, 198, 199, 114, 110, 186, 274, etc., with dates ranging from 03/28/2024 to 04/13/2024.

Personal List of Sales Orders (1828 Entries) Holmes Institute



This screenshot shows a SAP S/4HANA sales order report titled "List of Sales Orders (1828 Entries)". The report displays a large number of sales documents, their details, and associated materials. Key columns include Customer Reference, Doc. Date, Sales Document Type, Sales Document, Item, Sold-to Party, Material, Order Quantity (Item), Sales Unit, Net Val, and Sal... (partially visible). The data includes entries for many different customers and items, with dates ranging from 02/04/2025 to 05/05/2025.



- To make the report meaningful, we can sort on Net Value of the Order.

The screenshot shows the SAP S/4HANA List of Sales Orders screen with 84 entries. A red arrow points from the top-left of the main table area to the top-right of the toolbar, where a 'Sort' icon is located. A second red arrow points from the 'Sort' icon to the 'Sort Order' dialog window. Inside the 'Sort Order' dialog, a third red arrow points to the 'Column Name' dropdown, which has 'Net Value (Item)' selected. A fourth red arrow points to the 'Select' checkbox at the bottom right of the dialog, which is checked. The main table on the right shows columns for Customer Reference, Doc. Date, Sales Document Type, Sales Document, Item, Sold-to Party, Material, Order Quantity (Item), Sales Document Description, Net Value (Item), and Doc. Currency.

Click on Sort.  
From the sorting criteria, select Net Value. Select ✓

This screenshot shows a larger view of the SAP S/4HANA Sort Order dialog. A red box highlights the 'Sort Order' button in the top-left corner of the dialog. A red circle highlights the 'Column Name' dropdown in the 'Sort criteria' section, which contains 'Net Value (Header)'. A red box highlights the 'Select' checkbox at the bottom right of the dialog, which is checked. The 'Column Set' section on the right lists various sales document fields. A red box highlights the 'Select' checkbox at the bottom right of the dialog, which is checked. The 'Column Set' section on the right lists various sales document fields.

# SAP S/4HANA Reports

- The Sorted Sales Order report is displayed.

Screenshot of SAP S/4HANA Sales Order Report:

The screenshot shows two instances of the SAP Fiori application interface. Both instances display a table of sales orders. The top instance shows 84 entries, and the bottom instance shows 1828 entries. The table columns include Customer Reference, Doc. Date, Sales Document Type, Sales Document, Item, Sold-to Party, Material, Order Quantity (Item), Sal..., Net Value (Item), Doc. Currency, and a checkbox header. The bottom instance also includes a navigation bar with tabs like Personal, List of Sales Orders (1828 Entries), and a browser address bar showing the URL <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=100>.

Customer Reference	Doc. Date	Sales Document Type	Sales Document	Item	Sold-to Party	Material	Order Quantity (Item)	Sal...	Net Value (Item)	Doc. Currency
learn 118	04/10/2024	OR1	37	10	1003200	PRTR1836	5	EA	16,000.00	USD
LEARN19	04/13/2024	OR1	52	10	1003246	DXTR1006	5	EA	15,000.00	USD
Learn033	04/05/2024	OR1	24	10	1003134	DXTR2000	5	EA	15,000.00	USD
Learn-143	04/12/2024	OR1	48	10	1003193	DXTR1006	5	EA	15,000.00	USD
Learn-143	04/12/2024	OR1	46	10	1003193	DXTR1006	5	EA	15,000.00	USD
Learn-143	04/12/2024	OR1	45	10	1003193	DXTR1006	5	EA	15,000.00	USD
Learn-121	04/16/2024	OR1	70	10	1003342	DXTR1960	5	EA	15,000.00	USD
Learn-112	04/12/2024	OR1	44	10	1003119	DXTR1006	5	EA	15,000.00	USD
Learn-058	04/11/2024	OR1	41	10	1003193	DXTR1006	5	EA	15,000.00	USD
Learn-058	04/10/2024	OR1	40	10	1003193	DXTR1006	5	EA	15,000.00	USD
Learn-054	04/11/2024	OR1	42	10	1003119	DXTR1006	5	EA	15,000.00	USD
Learn-054	04/04/2024	OR1	22	10	1003119	DXTR1006	5	EA	15,000.00	USD
Learn-022	04/10/2024	OR1	39	10	1003119	DXTR1006	5	EA	15,000.00	USD
learn-014	04/01/2024	OR1	9	10	1003097	DXTR1964	5	EA	15,000.00	USD
Learn 147	04/13/2024	OR1	54	10	1003193	DXTR1006	5	EA	15,000.00	USD
199	04/15/2024	OR1	68	10	1003334	DXTR1199	5	EA	15,000.00	USD
198	04/15/2024	OR1	69	10	1003337	DXTR1960	5	EA	15,000.00	USD
196	04/09/2024	OR1	34	10	1003190	DXTR1115	5	EA	15,000.00	USD
191	04/12/2024	OR1	49	10	1003242	DXTR1191	5	EA	15,000.00	USD
190	04/13/2024	OR1	60	10	1003267	DXTR1126	5	EA	15,000.00	USD
157	03/30/2024	OR1	6	10	1003087	DXTR1115	5	EA	15,000.00	USD
145	03/28/2024	OR1	5	10	1003073	DXTR1145	5	EA	15,000.00	USD
139	04/13/2024	OR1	53	10	1003249	DXTR1139	5	EA	15,000.00	USD
126	04/13/2024	OR1	59	10	1003262	DXTR1118	5	EA	15,000.00	USD
126	04/13/2024	OR1	58	10	1003262	DXTR1501	5	EA	15,000.00	USD
119	04/10/2024	OR1	35	10	1003194	DXTR2989	5	EA	15,000.00	USD
115										
114										

Customer Reference	Doc. Date	Sales Document Type	Sales Document	Item	Sold-to Party	Material	Order Quantity (Item)	Sal...	Net Val
Bikes for Kids	02/04/2025	OR1	5268000		1006154				
BFK001	03/28/2024	OR	5100000		1003076				
657	08/29/2024	OR	5000657	10	1003894	DXTR1657	4	EA	1
314	12/31/2024	OR1	5000314	10	1005871	DXTR1314	4	EA	1
097	05/30/2024	OR1	5000097	10	1003747	DXTR1097	4	EA	1
022	05/31/2024	OR1	5000022	10	129022	DXTR1022	4	EA	1
041	03/28/2024	OR	5000001	20	1003071	DXTR1114	5	EA	1
274	02/07/2025	OR1	1627	10	1006205	DXTR1274	5	EA	1
274	02/07/2025	OR1	1627	20	1006205	DXTR2274	2	EA	
273	02/07/2025	OR1	1626	10	1006196	BECU1521	12	EA	1
241	02/06/2025	OR1	1625	10	1006189	DXTR1241	5	EA	1
145	02/06/2025	OR1	1624	10	1006174	DXTR1145	4	EA	1
145	02/06/2025	OR1	1624	20	1006174	DXTR2145	1	EA	
239	02/06/2025	OR1	1623	10	1006178	BECU1163	19	EA	2
239	02/06/2025	OR1	1622	10	1006178	BECU1163	19	EA	2
266	02/06/2025	OR1	1621	10	1006176	DXTR1266	5	EA	1
266	02/06/2025	OR1	1621	20	1006176	PRTR1266	2	EA	
265	02/05/2025	OR1	1620	10	1006165	DXTR1265	5	EA	1

## ■ Total Net Value

SAP Fiori App - List of Sales Orders (1828 Entries)

The screenshot shows a SAP Fiori application interface titled "List of Sales Orders (1828 Entries)". The URL is https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=... . The interface includes a top navigation bar with Personal, List, and a search bar. Below is a toolbar with various icons, one of which is highlighted with a red box. The main area displays a table of sales orders with columns for Doc. Date, Sales Order Number, Item, Sold-to Party, Material, Order Quantity, Net Value, and Doc. Currency. A summary row at the bottom is labeled "Total (Ctrl+F6)".

	Doc. Date	Sales Order Number	Item	Sold-to Party	Material	Order Quantity	Net Value	Doc. Currency
	01/10/2025	OR1	10	1005886	DXTR1388	4	12,000.00	USD
	01/09/2025	OR1	10	1005885	DXTR1360	4	12,000.00	USD
	01/09/2025	OR1	10	1005884	DXTR1360	4	12,000.00	USD
	01/06/2025	OR1	10	1005877	DXTR1373	4	12,000.00	USD
	01/04/2025	OR1	10	1005876	DXTR1377	4	12,000.00	USD
	01/03/2025	OR1	10	1005872	DXTR1431	4	12,000.00	USD
	01/01/2025	OR	10	1004136	DXTR1380	4	12,000.00	USD
	01/01/2025	OR1	10	1005871	DXTR1314	4	12,000.00	USD
	12/26/2024	OR1	10	1005867	DXTR1371	4	12,000.00	USD
	12/25/2024	OR1	10	1005865	DXTR1432	4	12,000.00	USD
	12/24/2024	OR1	10	1005864	DXTR1376	4	12,000.00	USD
	12/22/2024	OR1	10	1005863	DXTR1344	4	12,000.00	USD
	12/22/2024	OR1	10	1005862	DXTR1342	4	12,000.00	USD
	12/21/2024	OR1	10	1003578	DXTR1427	4	12,000.00	USD
	10/29/2024	OR1	10	1005861	DXTR1830	4	12,000.00	USD
	10/06/2024	OR1	10	1005845	DXTR1948	4	12,000.00	USD
	10/05/2024	OR1	20	1005843	DXTR1936	4	12,000.00	USD
	10/05/2024	OR1	10	1005843	DXTR1936	4	12,000.00	USD

## ■ Total Net Value

Screenshot of SAP S/4HANA Fiori application showing the "List of Sales Orders (1828 Entries)" report.

The report displays a grid of sales order details, including Doc. Date, Sales Document Type, Sales Document, Item, Sold-to Party, Material, Order Quantity (Item), Sales Unit, Net Value (Item), and Doc. Currency.

The total net value is highlighted in a red box at the bottom right of the grid, showing **20,230,202.50 USD**.

	Doc. Date	Sales Document Type	Sales Document	Item	Sold-to Party	Material	Order Quantity (Item)	Sal...	Net Value (Item)	Doc. Currency
	04/03/2024	OR1	16		1003097				0.00	USD
	04/03/2024	OR1	15		1003050				0.00	USD
	04/03/2024	OR1	14		1003050				0.00	USD
	04/03/2024	OR1	13		1003050				0.00	USD
	04/03/2024	OR1	12		1003097				0.00	USD
	04/03/2024	OR1	11		1003097				0.00	USD
	04/01/2024	OR1	10	10	1003100	DXTR1960		5 EA	15,000.00	USD
	04/01/2024	OR1	9	10	1003097	DXTR1964		5 EA	15,000.00	USD
	03/31/2024	OR1	8	10	1003094	DXTR3000		3 EA	9,000.00	USD
	03/31/2024	OR1	8	20	1003094	DXTR1960		2 EA	6,000.00	USD
	03/30/2024	OR	7	20	1003091	DXTR1115		2 EA	6,000.00	USD
	03/30/2024	OR	7	10	1003091	DXTR1114		3 EA	9,000.00	USD
	03/30/2024	OR1	6	10	1003087	DXTR1115		5 EA	15,000.00	USD
	03/28/2024	OR1	5	10	1003073	DXTR1145		5 EA	15,000.00	USD
	03/28/2024	OR1	5	20	1003073	DXTR2145		2 EA	6,000.00	USD
	03/07/2024	OR1	4	20	1003050	PRTR1000		2 EA	6,400.00	USD
	03/07/2024	OR1	4	10	1003050	DXTR1000		5 EA	15,000.00	USD
									<b>20,230,202.50</b>	<b>USD</b>

System status bar at the bottom:

- Search bar: Search
- Icons: File, Print, Home, etc.
- Date/Time: 08:06 06/04/2025

## ■ Click Filter >> Select Material

Personal    List of Sales Orders (1828 Entries)    +

←    C    https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...    ⚡    ⭐    Update    ⚑    ...    🎨

< SAP List of Sales Orders (1828 Entries) ▾

List ▾   Edit ▾   Goto ▾   Settings ▾   Environment ▾   System ▾   Help ▾   ⚙ ▾

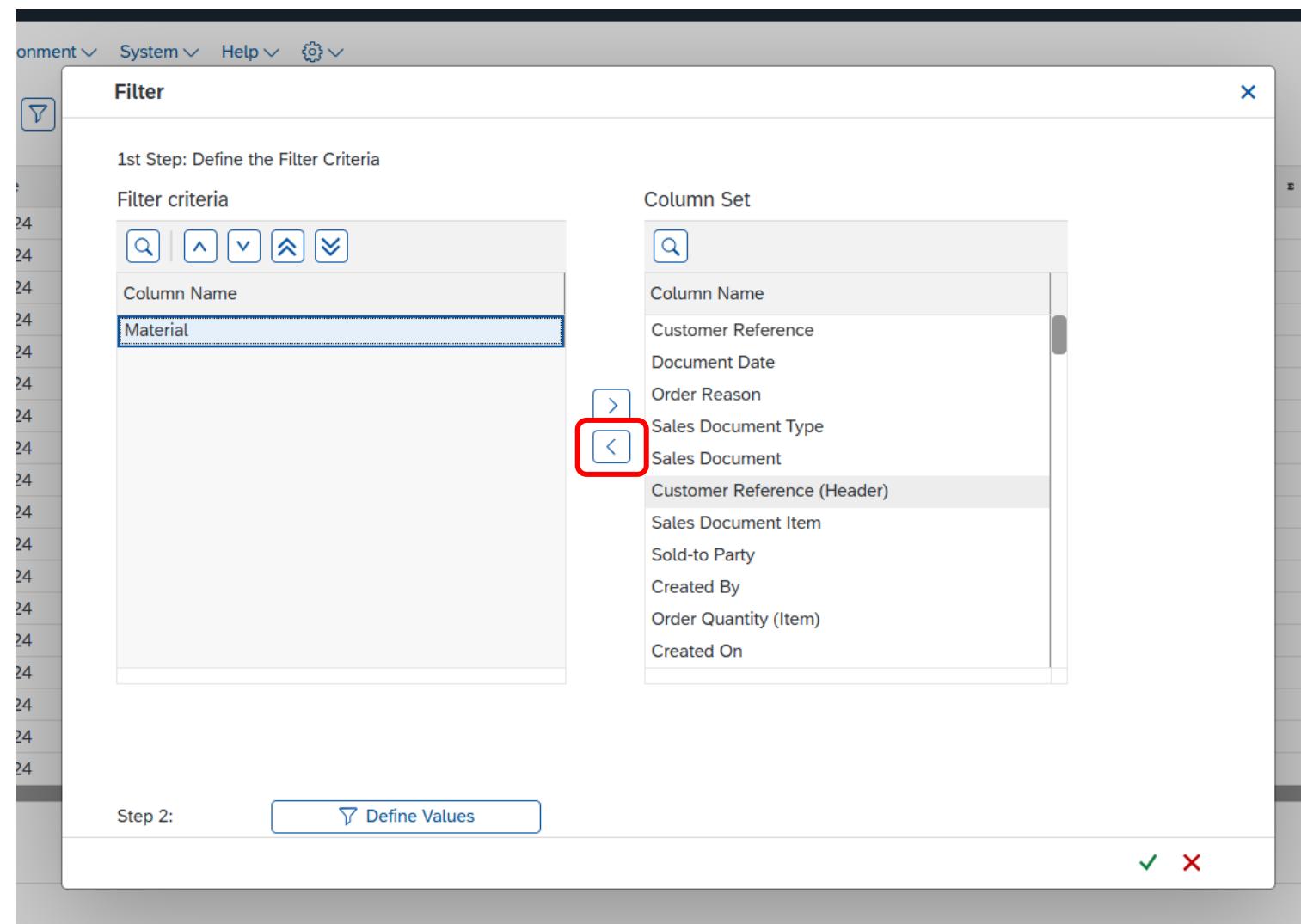
Exit    ⚡    ⚑

Set Filter (Ctrl+F5)

	Doc. Date	Document	Item	Sold-to Party	Material	Order Quantity (Item)	Sal...	Net Value (Item)	Doc. Currency
	04/03/2024	OR1 17	20	1003106	DXTR2115		2 EA	6,000.00	USD
	04/03/2024	OR1 16		1003097				0.00	USD
	04/03/2024	OR1 15		1003050				0.00	USD
	04/03/2024	OR1 14		1003050				0.00	USD
	04/03/2024	OR1 13		1003050				0.00	USD
	04/03/2024	OR1 12		1003097				0.00	USD
	04/03/2024	OR1 11		1003097				0.00	USD
	04/01/2024	OR1 10	10	1003100	DXTR1960		5 EA	15,000.00	USD
	04/01/2024	OR1 9	10	1003097	DXTR1964		5 EA	15,000.00	USD
	03/31/2024	OR1 8	10	1003094	DXTR3000		3 EA	9,000.00	USD
	03/31/2024	OR1 8	20	1003094	DXTR1960		2 EA	6,000.00	USD
	03/30/2024	OR 7	20	1003091	DXTR1115		2 EA	6,000.00	USD
	03/30/2024	OR 7	10	1003091	DXTR1114		3 EA	9,000.00	USD
	03/30/2024	OR1 6	10	1003087	DXTR1115		5 EA	15,000.00	USD
	03/28/2024	OR1 5	10	1003073	DXTR1145		5 EA	15,000.00	USD
	03/28/2024	OR1 5	20	1003073	DXTR2145		2 EA	6,000.00	USD
	03/07/2024	OR1 4	20	1003050	PRTR1000		2 EA	6,400.00	USD
	03/07/2024	OR1 4	10	1003050	DXTR1000		5 EA	15,000.00	USD



- Click Filter >> Select Material





## ■ Define Values

The screenshot shows the SAP S/4HANA Filter dialog. On the left, under 'Filter criteria', the 'Column Name' field contains 'Material'. On the right, under 'Column Set', there is a list of various fields: Customer Reference, Document Date, Order Reason, Sales Document Type, Sales Document, Customer Reference (Header), Sales Document Item, Sold-to Party, Created By, Order Quantity (Item), and Created On. A red box highlights the 'Define Values' button at the bottom left of the dialog.

1st Step: Define the Filter Criteria

Filter criteria

Column Name

Material

Column Set

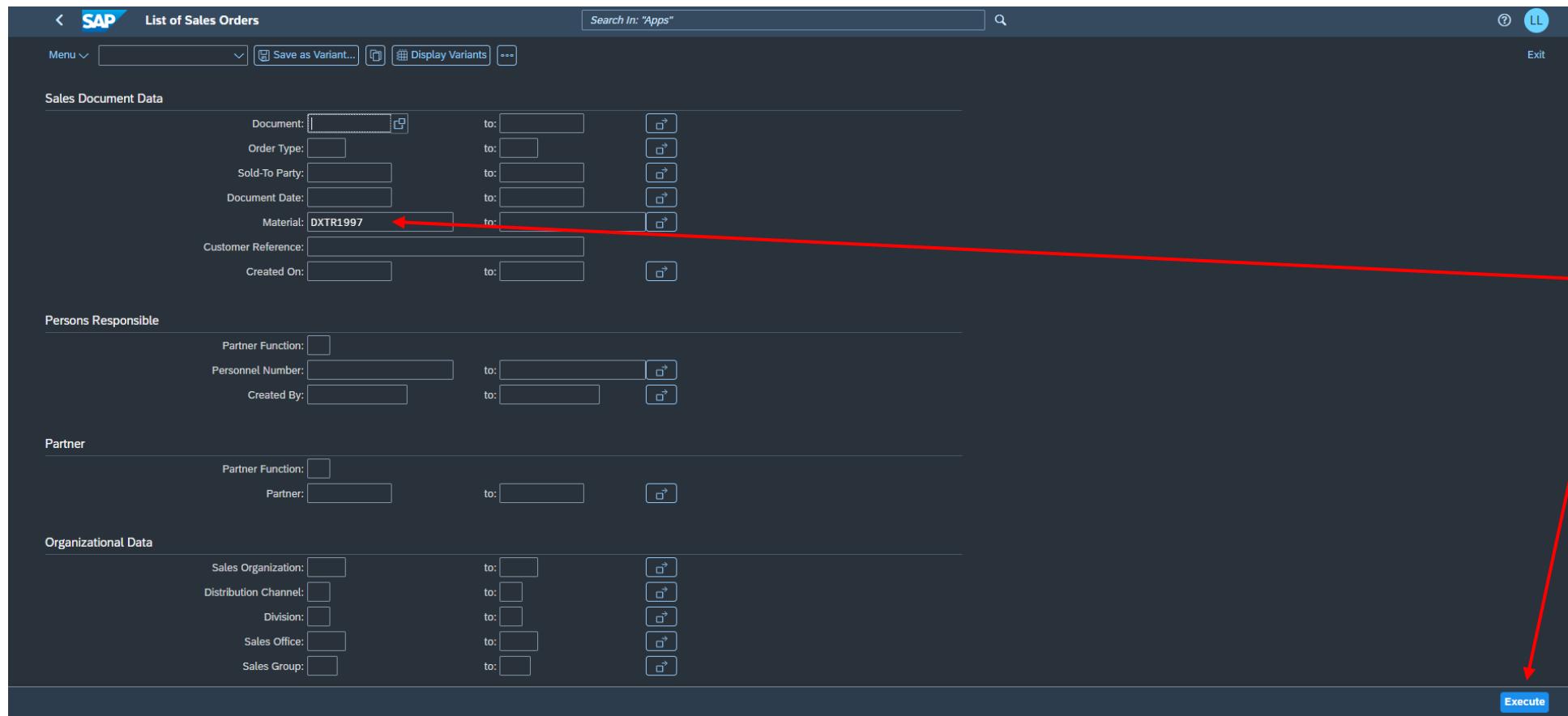
Customer Reference  
Document Date  
Order Reason  
Sales Document Type  
Sales Document  
Customer Reference (Header)  
Sales Document Item  
Sold-to Party  
Created By  
Order Quantity (Item)  
Created On

Step 2:

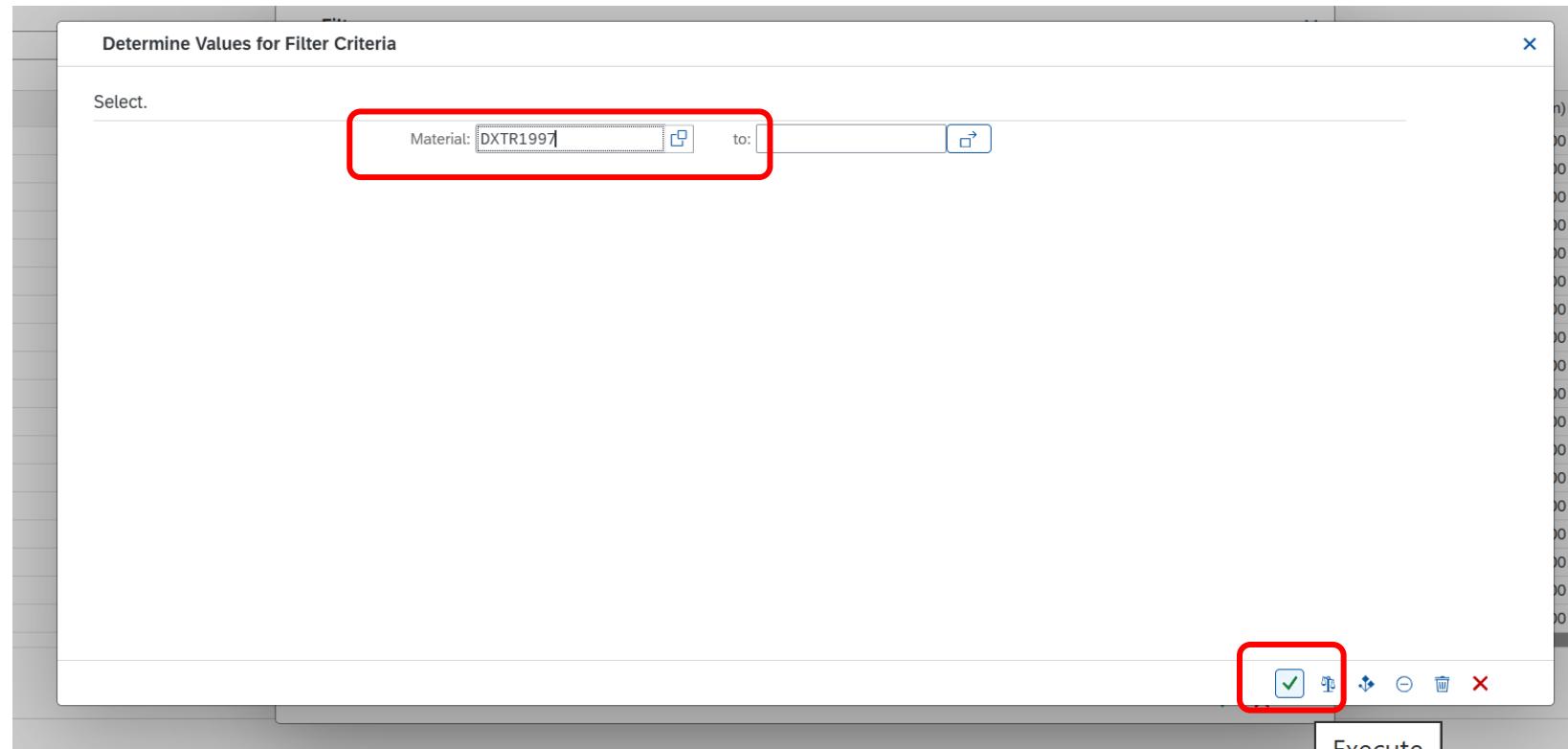
Define Values

✓ ✗

- Drilling Down – Data Analysis
- Determine the weight of materials in a particular order.



Click on the  
**List Sales**  
Order to initiate  
a new report.  
Type  
**DXTR1997** in  
the Material  
field.  
Press **Execute**.



## ■ DXTR1114

## Restrict Value Range (1)

Search and Select

Restrictions ▾

**Go** Show Filters 

Items (937)

DXTR1114



Find

Find next

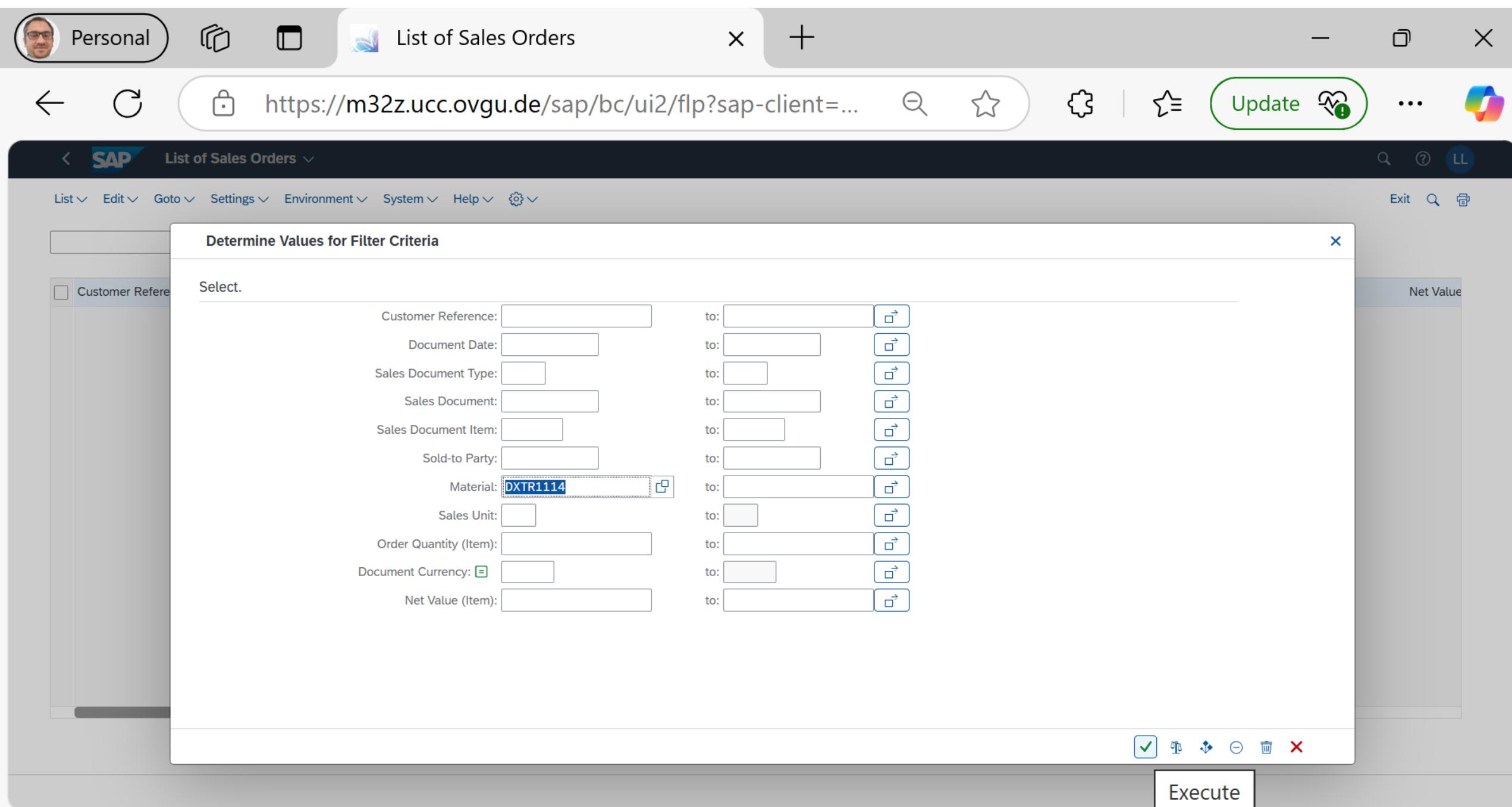


Material
DXTR1114
DXTR1274
DXTR2274
BECU1521
DXTR1241
DXTR1145
DXTR2145
BECU1163
DXTR1266
PRTR1266
DXTR1265
DXTR2229

Entry found

**OK** Cancel

## ■ Execute



The screenshot shows the SAP S/4HANA Fiori Launchpad interface. At the top, there is a navigation bar with a user profile icon, 'Personal', a folder icon, and a search bar containing 'List of Sales Orders'. Below the search bar is a URL bar with the address <https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...>. To the right of the URL bar are icons for 'Update', a heart with a gear, and a three-dot menu.

The main content area displays a report titled 'List of Sales Orders'. On the left, there is a sidebar with a 'Customer Reference' filter. A modal dialog box titled 'Determine Values for Filter Criteria' is open, showing various filter fields: Customer Reference, Document Date, Sales Document Type, Sales Document, Sales Document Item, Sold-to Party, Material (with value 'DXTR1114' highlighted), Sales Unit, Order Quantity (Item), Document Currency, and Net Value (Item). Each field has a corresponding input box and a 'to:' button. At the bottom of the modal are several action buttons: a green checkmark, a blue plus sign, a blue minus sign, a blue minus sign with a circle, a trash can, and a red X.

At the bottom right of the main report area, there is a large 'Execute' button.

- Double Click on any Sales Document number from the list.

For example, click on a row with Sales Document like 21, 67, or 5000001 (all for material DXTR1114).

# SAP S/4HANA Reports

- Look for Total Weight and Note it
- Click on Save

SAP Change Standard order 21: Overview

Personal       Change Standard order 21: Ove www.microsoft.com

Back https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...

Sales Document Edit Goto Extras Environment System Help

Standard order: 21 Net Value: 15,000.00 USD  
 Sold-to Party: 1003121 Bikes for Kids, 461 Sunset Ave, Palm Beach FL 32804, USA   
 Ship-to Party: 1003121 Bikes for Kids, 461 Sunset Ave, Palm Beach FL 32804, USA  
 Cust. Reference: 043 Cust. Ref. Date:

Sales Item Overview Item detail Ordering party Procurement Shipping Reason for rejection

\* Req. Deliv.Date: 04/04/2024 Deliver.Plant:   
 Complete Dlv.:  Total Weight: 42,550 G   
 Delivery Block: Volume: 0.000  
 Billing Block: Pricing Date: 04/04/2024  
 Pyt Terms: 0001 immediately w/o deduction  
 Inc. Version:   
 Incoterms: FOB  
 Inc. Location1: Florida

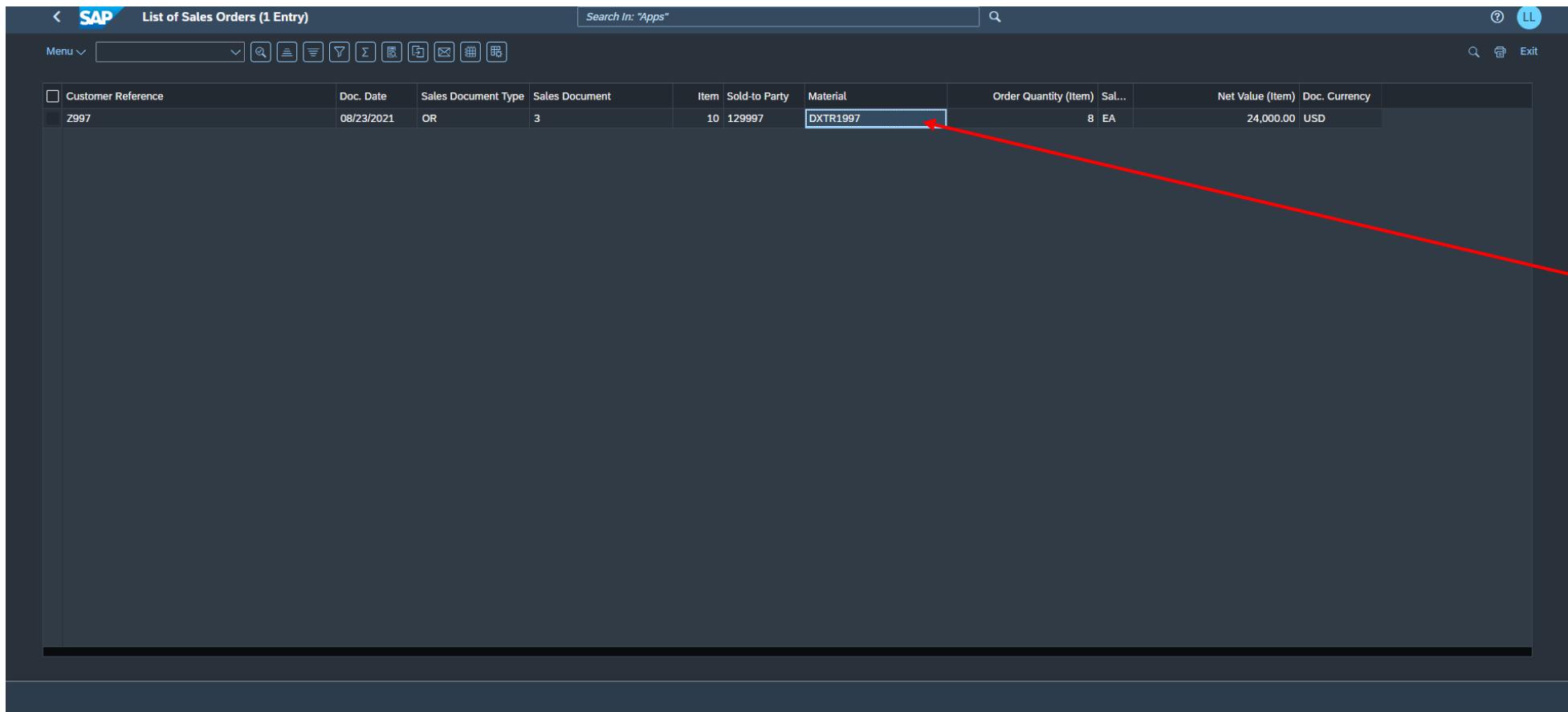
All Items

Item	Material	Req. Segment	Order Quantity	Un	S	Item Description	Customer Material Number	ItCa	HL Itm	D.. Fir:
<input checked="" type="checkbox"/> Consider the subsequent documents <a href="#">View Details</a>										

Save Cancel

# SAP S/4HANA Reports

- The Sales Order report is displayed.

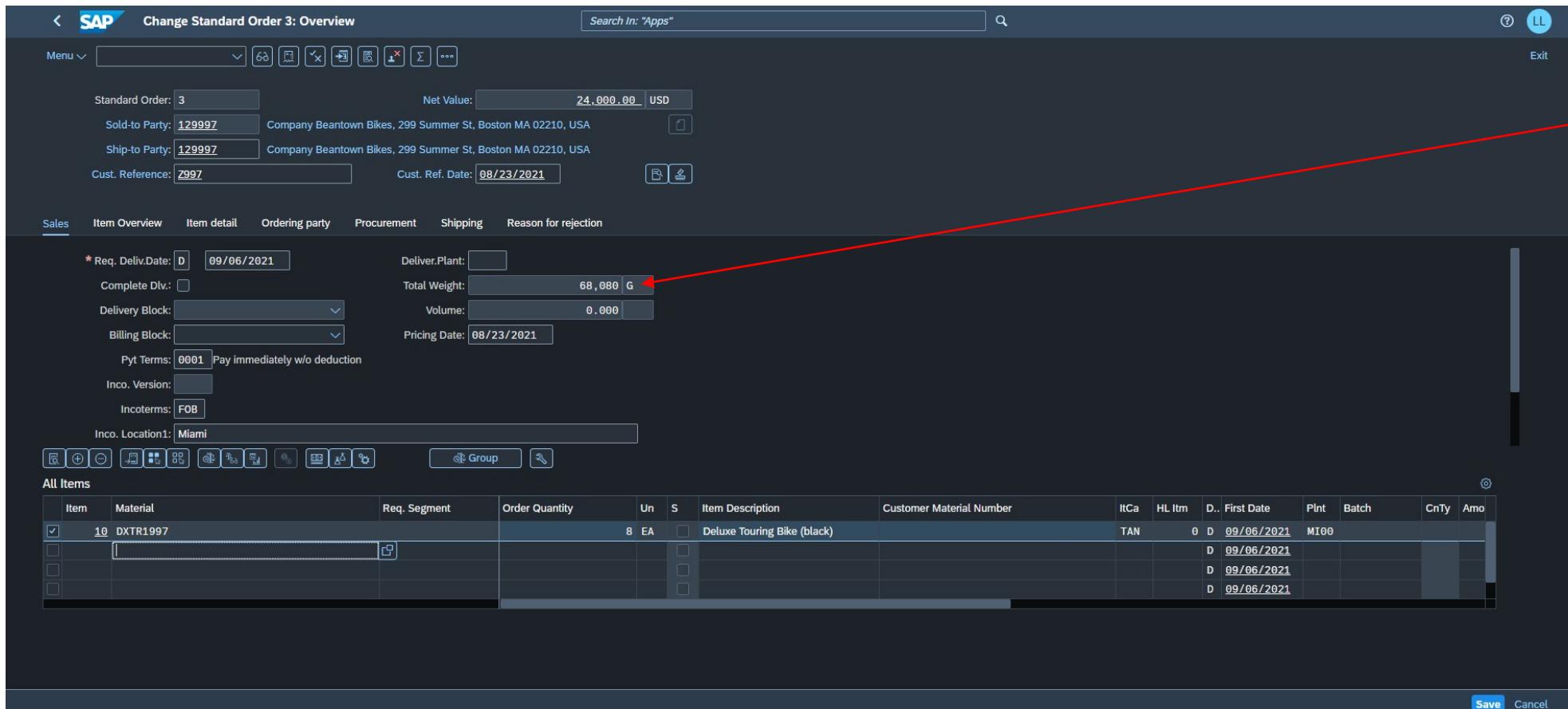


Customer Reference	Doc. Date	Sales Document Type	Sales Document	Item	Sold-to Party	Material	Order Quantity (Item)	Sal...	Net Value (Item)	Doc. Currency
Z997	08/23/2021	OR	3	10	129997	DXTR1997	8	EA	24,000.00	USD

To Drill Down for more details, double click on **DXTR1997** in the materials field.

# SAP S/4HANA Reports

- The Sales Order details report is displayed.



The screenshot shows the SAP S/4HANA Sales Order Details Report for Standard Order 3. The report displays various order details and a table of items. A red arrow points to the 'Total Weight' field, which shows '68,080 G'. The table below lists one item: Deluxe Touring Bike (black) with a quantity of 8 EA.

Item	Material	Req. Segment	Order Quantity	Un	S	Item Description	Customer Material Number	ItCa	HL Itm	D..	First Date	PInt	Batch	CnTy	Amo
<input checked="" type="checkbox"/> 10	DXTR1997		8	EA		Deluxe Touring Bike (black)		TAN	0	D	09/06/2021		MI00		
<input type="checkbox"/>										D	09/06/2021				
<input type="checkbox"/>										D	09/06/2021				
<input type="checkbox"/>										D	09/06/2021				

The Net Weight  
of the Order  
Items is  
Displayed.



HOLMES  
INSTITUTE

**Logging Off**

# Logging Off

- Always Log off to protect the data and to avoid unauthorised use.

The SAP Fiori Launchpad interface features a dark-themed header with the SAP logo and a "Home" dropdown. Below the header is a navigation bar with links like "My Home", "Controlling", "Customizing", "Enterprise Asset Management", "Financial Accounting", "Human Capital Management", "Materials Management", "Production Planning and Execution", "Project System", "Quality Management", and "Sales and D". A central search bar contains the placeholder "Search In: 'Apps'". To the right is a user menu with a profile picture and the text "Learn-599 Learn-599". The main content area displays a large blue tent icon inside a white cloud, with the text "Nothing here yet?" and "You can add your preferred apps to this page." A "Edit Page" button is located at the bottom.

To Log Off, Click on LL Profile and select Sign Out, and press OK.

The screenshot shows a SAP Fiori application running in a web browser. The title bar includes the SAP logo, the page title "List of Sales Orders (10 Entries)", and the URL "https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=...". The browser interface has standard controls like back, forward, search, and refresh. A sidebar on the right contains user information and links for recent activities, frequently used items, app finder, settings, contact support, about, and sign out. The main content area displays a table of sales orders with columns for Customer Reference, Doc. Date, Sales Document Type, Sales Document, Item, Sold-to Party, Material, Order Quantity (Item), and Sales Unit.

	Customer Reference	Doc. Date	Sales Document Type	Sales Document	Item	Sold-to Party	Material	Order Quantity (Item)	Sal...
	041	03/28/2024	OR	5000001	20	1003071	DXTR1114	5	EA
	660	08/27/2024	OR1	1133	10	1004477	DXTR1114	5	EA
	227	06/03/2024	OR1	877	10	1004574	DXTR1114	5	EA
	114	06/03/2024	OR1	871	10	1003324	DXTR1114	4	EA
	001	05/19/2024	OR1	384	10	1003635	DXTR1114	4	EA
	Learn-187	04/20/2024	OR	77	10	1003355	DXTR1114	5	EA
	548	04/16/2024	OR1	74	10	1003348	DXTR1114	4	EA
	114	04/14/2024	OR1	67	10	1003324	DXTR1114	5	EA
	043	04/04/2024	OR1	21	10	1003121	DXTR1114	5	EA
	162	03/30/2024	OR	7	10	1003091	DXTR1114	3	EA



HOLMES  
INSTITUTE

**End of Workshop 1  
Week 2 & 3**

# HOLMES INSTITUTE



## Holmes Institute SAP Tutorial



## SAP ERP: S/4HANA

### Introduction

#### MOTIVATION

This tutorial is an introduction to the SAP S/4HANA enterprise system.

It can be used in the classroom or for self-study.

On completion of the course, students will be able to understand the basic navigation and functionality concepts of the enterprise systems.

The material also serves as a reference for occasional users of SAP systems.

#### LEARNING METHOD

The learning method used is "guided learning." The benefit of this method is that knowledge is imparted quickly. Students also acquire practical skills and competencies.

**Exercises, in the end, enable students to put their knowledge into practice.**

#### Product

SAP S/4HANA

#### Level

Introductory

#### Focus

ERP Systems

#### Author

Professor. Paul Hawking

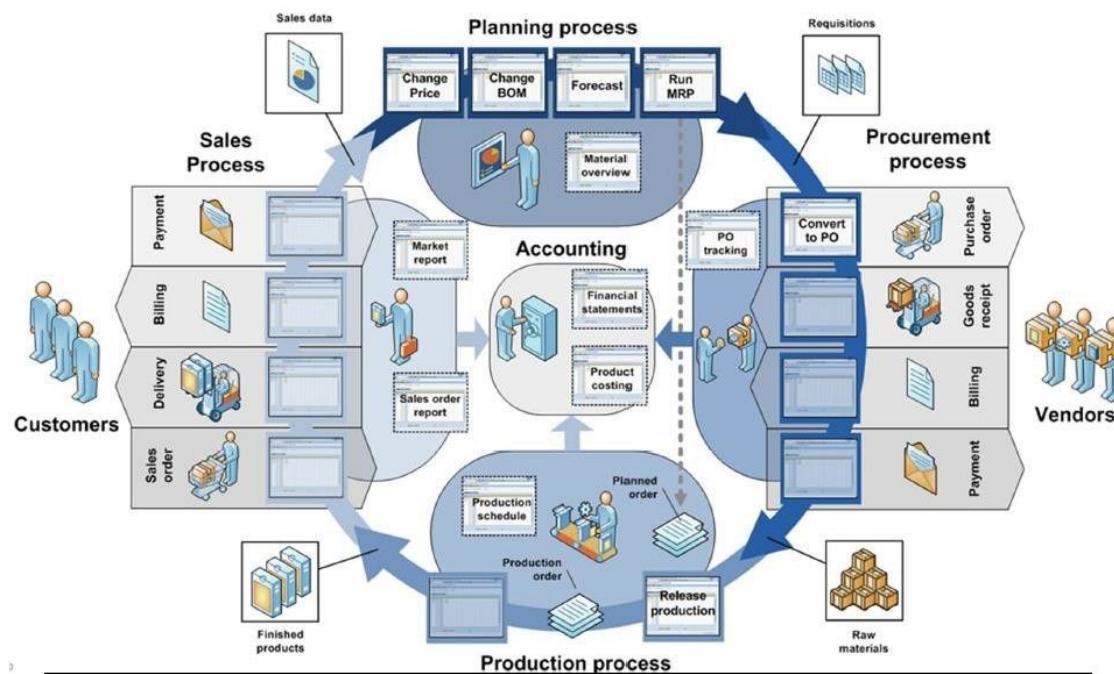
#### Version 3.2024

**SAP Mentors**

## Introduction to SAP ERP

SAP's Enterprise Resource Planning (ERP) system is designed to assist an organisation in integrating and managing business processes. The system deals with the problems of organising and executing the millions of transactions that are fundamental to many large businesses. SAP is the leader in the ERP market. SAP ERP is a very large system that incorporates over 30,000 tables and 50,000 transactions. This tutorial is an introduction designed to assist you with familiarising yourself with the SAP ERP basics utilising SAP's latest ERP release: S/4HANA.

The exercises will focus on how these Enterprise systems support the key accounting functions in an organisation. Accounting processes are core to the operations of a business. These processes support the other business scenarios within an organisation.



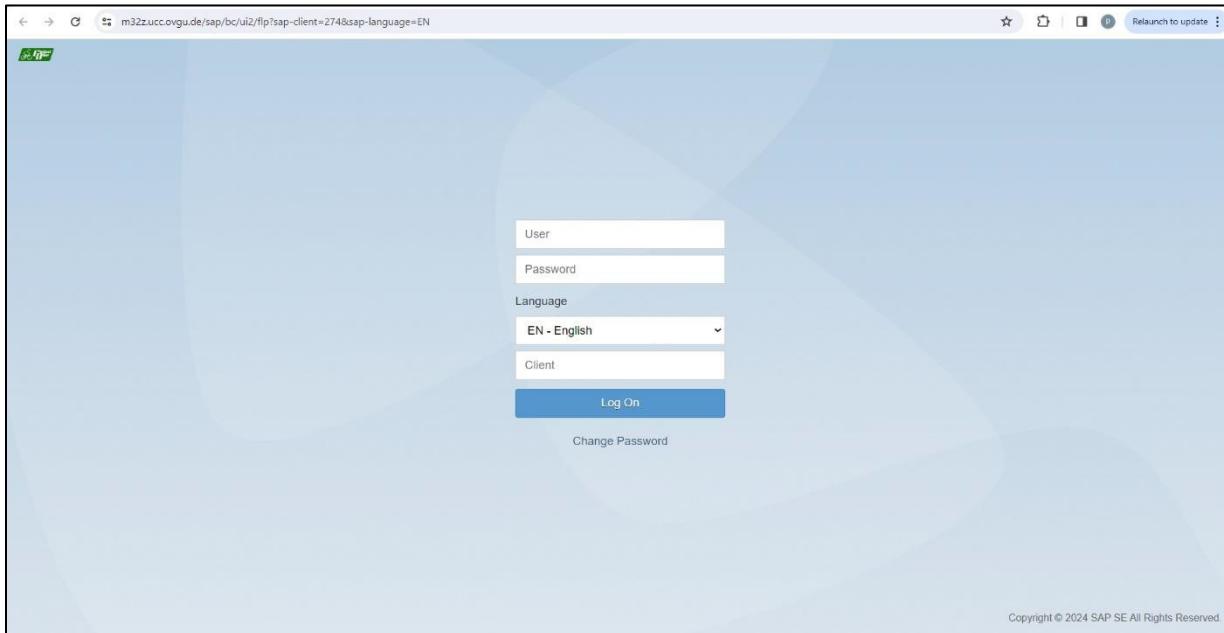
## Logging on to the SAP System

There are various techniques to open **SAP S/4HANA**. For the purpose of these exercises you will access the ERP system via a web browser.

Type

1. Type `https://m32z.ucc.ovgu.de/sap/bc/ui2/flp?sap-client=274&sap-language=EN` in the Address bar.
2. Press <ENTER> to display the S/4HANA logon screen.

The S/4HANA logon screen appears similar to the one below:



SAP S/4HANA can operate on a variety of personal computers using different operating systems. You can access S/4HANA either through the traditional interface (SAPGUI) or the new interface (Fiori) built with HTML5 based (web) on the UI5 standard. But no matter which equipment, operating system or interface is used, there are some necessary requirements:

### Log On details

Due to the value of the information stored in the ERP system, it is necessary to control the access to the software. The SAP administrator would need to establish a user account for each user who intends to use the ERP system. Each user account is identified by a user name and requires a password for security. Each user account is also allocated a particular type of security profile which determines the data a user is allowed to view and change.

The other log on detail you require is the **Client** number. A **Client** is a set of self-contained tables required for processing transactions in the SAP system. A Client could be created for separate companies in an organisation. A user in one client cannot change the data in another **Client**. You will need to know your **user name**, **Password** and **client** before you attempt to access the system. These can be obtained from your workshop leader.



#### ☛ Identify your log on details

User name	LEARN-###
Password	_____
Client	289

3. Type your User Id **LEARN-###** where **###** is the number assigned to you.
4. Press **<TAB>** to move the cursor to the **Password** text box.
5. Type your **Password**, which the workshop leader will supply.

To hide your Password from other people, it is hidden by ●● as you type.

6. Type the **Client** details as provided by the workshop leader.
7. Click **Log On** to authorise your details.

A new screen will appear, which allows you to enter a new password to replace the temporary one you were supplied with.

You now need to create a new password. You will be the only person who knows this Password, so it is important to create a password that is easy to remember. However, the ERP system has some rules about what it allows to be a password. The system administrator can change these rules. But in general, the following applies:

#### Password Rules

Passwords must be at least six characters.  
Passwords are case-sensitive.  
Passwords cannot start with a blank space, question mark (?). or an exclamation mark (!).  
The Password cannot be any of the previous five passwords.



8. Type your **Current Password**.
  9. Type your **New Password**.
  10. Type your new password again in the **Repeat Password** field to confirm it.
11. Click **Change** to change your Password.

After initially logging on to the SAP S/4HANA system, a tutorial screen appears:

The screenshot shows the SAP Fiori launchpad 'Get Started' screen. On the left, a vertical sidebar titled 'Quick Tour' contains buttons for 'Get Started', 'Discover My Home', 'Adapt the Layout', 'Search', 'Change the Appearance', and 'Get Help'. The main area displays a grid of tiles for procurement tasks like 'Procurement Overview', 'Process Purchase Requisitions', and 'Monitor Purchase Requisition Items'. A callout box labeled 'Get Started' points to the first tile. Below the tiles, text explains how to start applications by clicking on tiles or links. At the bottom, a blue arrow points right, indicating the next step.

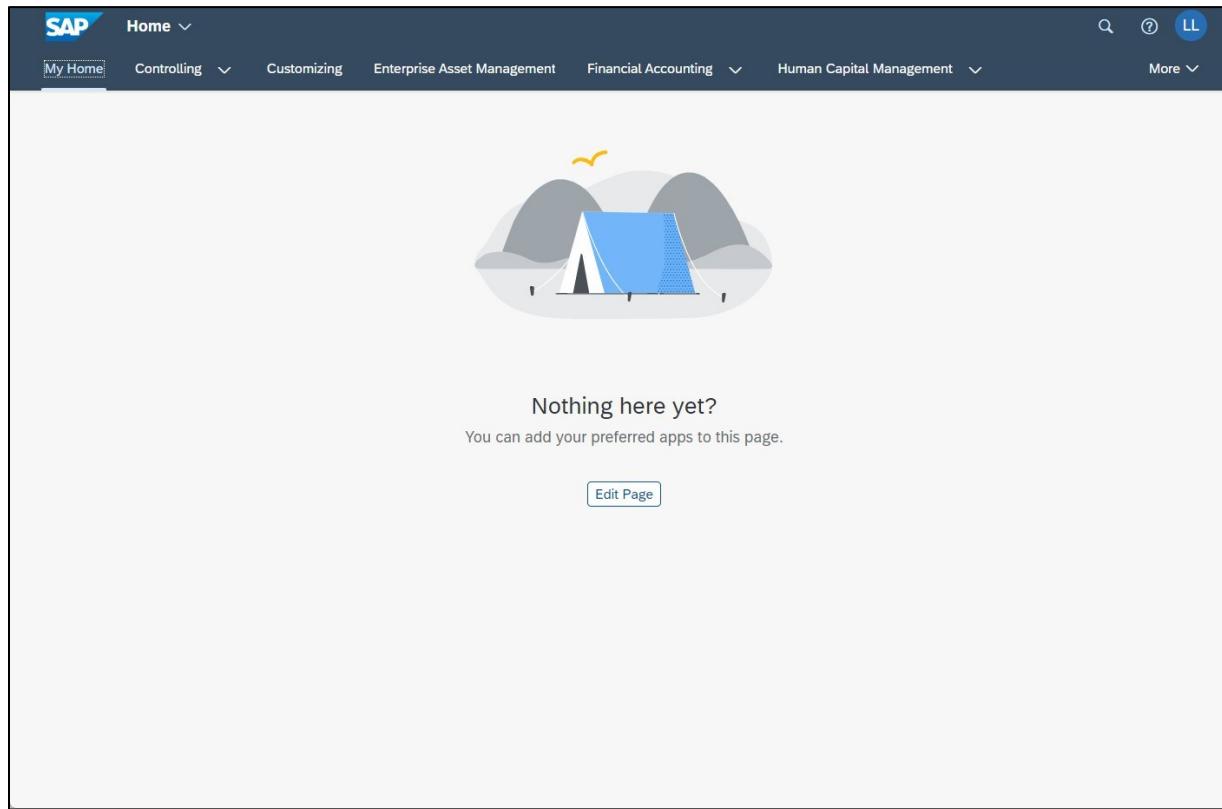
You can undertake the **Quick Tour** tutorial to get a better understanding of the system environment.

This Quick Tour is available at anytime by clicking the Help icon

12. Click to close the **Quick Tour** tutorial screen.

## SAP S/4HANA Fiori Launch Pad

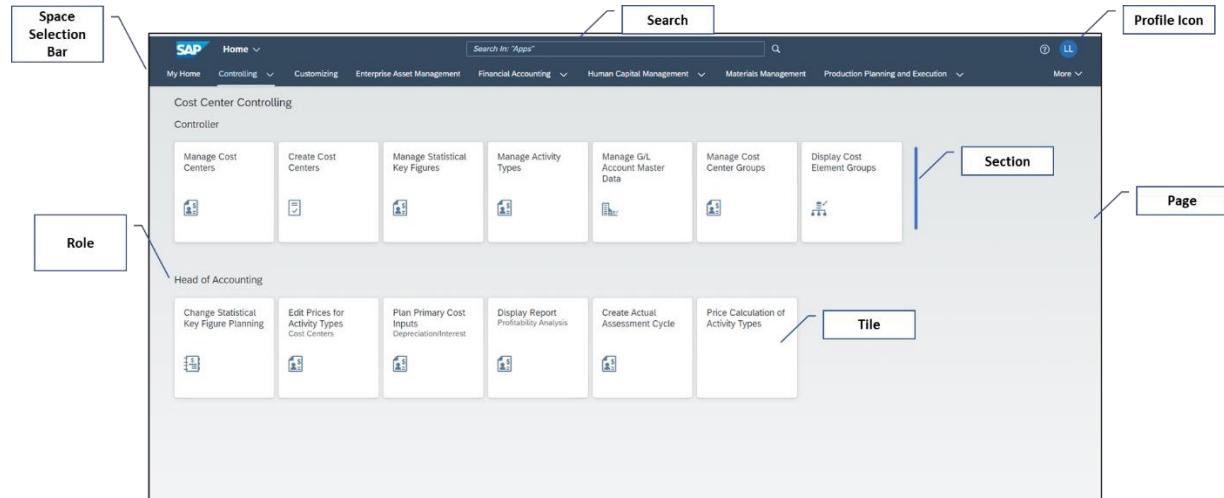
The SAP Fiori launch pad home page is the first page that users see after they have logged on. It is the main entry point to SAP Fiori apps on mobile and desktop devices. The home page is the primary place where a user will look for applications. The page features tiles that allow the user to launch apps and may show additional information. The page can be personalised, and tiles can be added, removed, or bundled in groups.



At the moment your **Launch Pad** contains Fiori Apps. As the Launch Pad screen is the main way users interact with the system there are several screen elements you need to become familiar with. To view a **Launch Pad** screen:

13. Click **Controlling** on the Space Selection Bar.

The following screen appears which includes the following elements:



## Space

At the highest level the Launch Pad contains Spaces (**Controlling** etc.). A space serves as an entry point for a business role and shows information and functions that are assigned to that business role. A space consists of one or multiple pages that are used to further structure the content of a space.

## Page

A Page is part of a Space, and a space may have one or multiple pages. Each Page contains a number of Fiori Apps. Business roles with fewer apps may use one Page per Space, whereas business roles with more apps may use multiple Pages per Space. A Page consists of sections that are used to further structure the content.

## Tiles

The Tiles provide direct access to Fiori Apps or content. They are similar to large icons and have a rectangular shape. The Launchpad comes with a predefined set of groups and Tiles. However, the user can also personalise the launchpad home page to reflect their individual roles by choosing from the App finder's wide range of ready-to-use tiles.



Tiles differ in the content they display. They can contain an icon, a title, some informative text, numbers, and charts. The information that is shown depends on the function of the tile or app.



Icon

Chart

Number

#### Profile Icon

The Profile Icon provides access to the **Me Area**. This area provides a number of options for customising your Home screen. It also lists the most recent tiles or objects you have worked on.

#### Search Icon

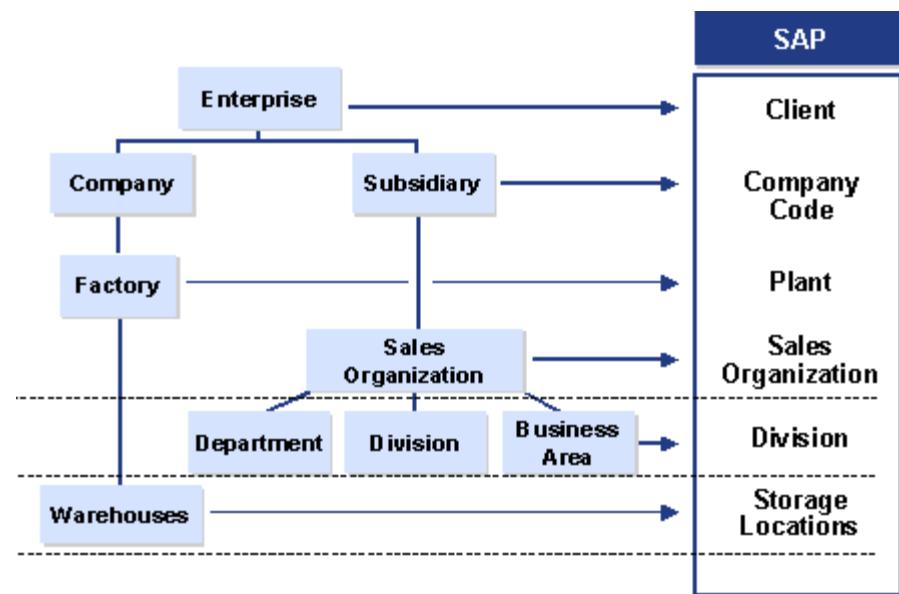
The Search Icon allows users to find business objects such as materials or sales orders and tiles such as Leave Request or Current Accounts Balance.

## ERP Terminology

While using the SAP system, you will encounter a number of ERP terms that are important to understand if you understand how these systems operate.

**Business Scenario:** Grouping of business processes in a specific **organisational unit** that share some similar goals in the enterprise, such as purchasing, services, balance sheet preparation, production, personnel administration, and so on.

**Organisational Units:** An organisational unit represents any type of organisational entity found within a company, for example, subsidiaries, divisions, departments, or special project teams. These organisational units need to be mapped in the SAP ERP system as they are the locations where the various **Business Scenarios** occur. Some of the possible organisational units are displayed below

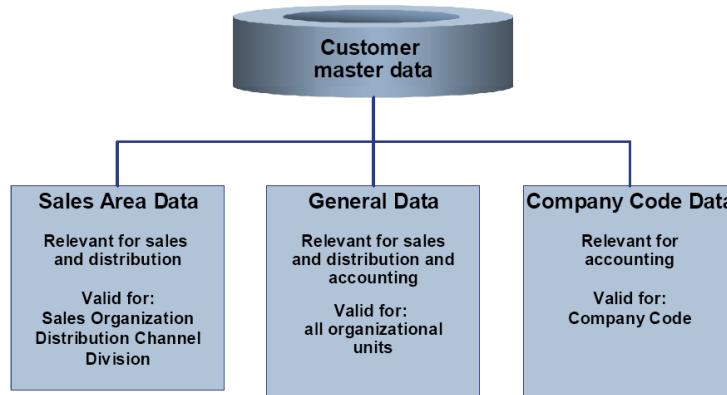


The types of **organisational units** mapped in the SAP system will depend upon which **Business scenarios** will be used. Some units are only relevant to specific SAP modules.

- ☒ List some of the **Organisational Units** you would find in a university.

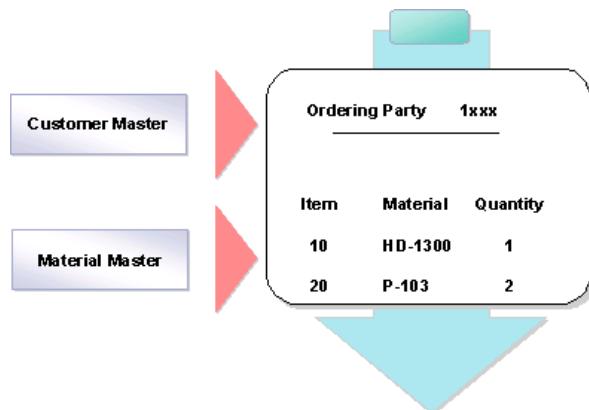
### Master Data:

Business Scenarios involve various objects such as customers, vendors, products, employees etc. Data that describes these objects are referred to as **Master Data**. This data describes the various objects stored within the SAP system. This data usually remains unchanged over an extended period of time. A **Master Data** object, such as a customer, can be used by more than one module. Each module may only be concerned with certain aspects of the **Master Data**.



☛ List **Master Data** objects in a Student Administration system

**Transactions:** are application programs that execute business processes in the ERP system. They usually result in the interaction with master data objects such as creating a customer order, posting an incoming payment, or approving a leave request. The majority of processing in the SAP ERP system is related to transactions. For example, the diagram below illustrates a **Transaction**, the interaction between the **Master Data** objects of **Customer** and **Material** in the creation of a sales document.



**Document:** A data record that is generated when a transaction is carried out and contains all the predefined information such as sales document, order, pay slip etc.

**Reports:** Program which reads certain data elements and displays them in a list. SAP has extensive reporting facilities which enable users to access and display the data in various formats.



## Case Study

### Scenario

The SAP system you are working on has been configured to support a fictitious company, Global Bikes Inc (GBI). Global Bikes Inc (GBI) was founded in 2001 following the merger of two bicycle manufacturers, one based in the US and the other in Germany. GBI has three lines of business: deluxe and professional touring bikes, men's and women's off-road bikes, and bike accessories. GBI sells its bikes to a network of specialised dealers throughout the world, and it procures its raw materials from a variety of suppliers globally.

GBI has two manufacturing facilities in the US and one in Germany. It also has three additional warehouses, two in the US and one in Germany. GBI has more than 100 employees globally. The organisation uses SAP ERP to support its processes. The company has a new bicycle for sale - Mongoose Mountain Bike. The SAP systems contain all the necessary data to support GBI's business processes.

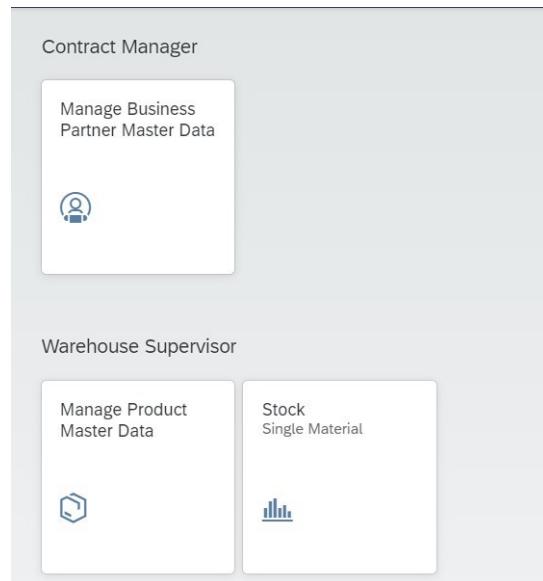
### SAP S/4HANA Navigation

#### Master Data Navigation

An ERP system stores vast amounts of data about the various objects used in different business processes. To display the data, you require from such a large system; there are various navigation techniques you need to become familiar with. SAP S/4HANA includes a number of tools that can facilitate this navigation.

This exercise requires you to find the **Master Data** for a particular product. The product we are interested in is referred to as **Deluxe Touring Bike**. The **Master Data** referring to a product is called a **Material Master**. To display the **Material Master** for a product you will use the Display Material App. You would expect this to be available in the **Material Management** Space.

14. Click **Materials Management** on the **Space Selection Bar** to display this Space.





You will notice that the Apps have been customized around the business roles that would perform that activity. This improves the usability of the system.

15. Scroll down to display the **Warehouse Employee** business role.

16. Click **Display Material** app to start this transaction.

The **Display Material: Initial Screen** appears:

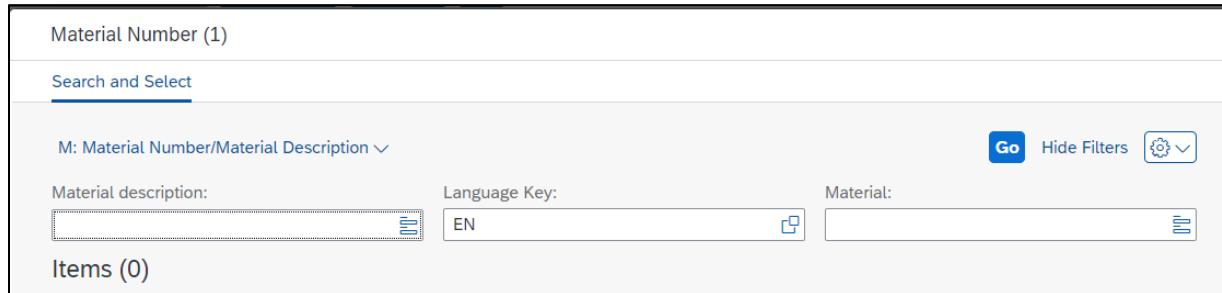
The screenshot shows the SAP Display Material (Initial Screen). At the top, there is a header with the SAP logo and the title "Display Material (Initial Screen)". Below the header, there is a search bar with the placeholder text "Material:" and a small icon. To the right of the search bar are buttons for "Select View(s)", "Org. Levels", and "Data". At the bottom right of the screen is a blue "Continue" button.

The screen requires the details of the **Material** you want to display. If you can remember the details of the **Material**, you can type them directly into the Material field. Notice that the Material field has an \* which indicates that it is required information for this transaction to occur. Often it is difficult to remember the Material's details, so you would need to search for it. In this exercise, you want to search for a material (product) called "Deluxe Touring Bike".

There are usually thousands of different Materials (products) in the ERP system, and a facility called a match code can make the searching for a Material a lot easier. A match code is a method of finding a certain piece of data when you do not know the specific details of that record.

To access the match code tool for a particular field, you click the  icon of the relevant field

17. Click  to display a **Search** dialogue box.



The screenshot shows the SAP Material Number search dialog box. At the top left is the label "Material Number (1)". Below it is a "Search and Select" section with a dropdown menu "M: Material Number/Material Description". Underneath are three input fields: "Material description" (with a dropdown arrow), "Language Key" set to "EN", and "Material" (with a dropdown arrow). At the bottom left is the label "Items (0)". At the top right of the dialog are buttons for "Go", "Hide Filters", and a filter icon.

There are numerous ways to search for a Material. We want to search by **Material description**.

#### Match Codes

You are able to replace letters and numbers by using **wildcards**. A summary of the different types of wildcards can be seen below:

Wildcard	Represents
* and +	Characters you do not know
*	Multiple characters
+	Exactly one character

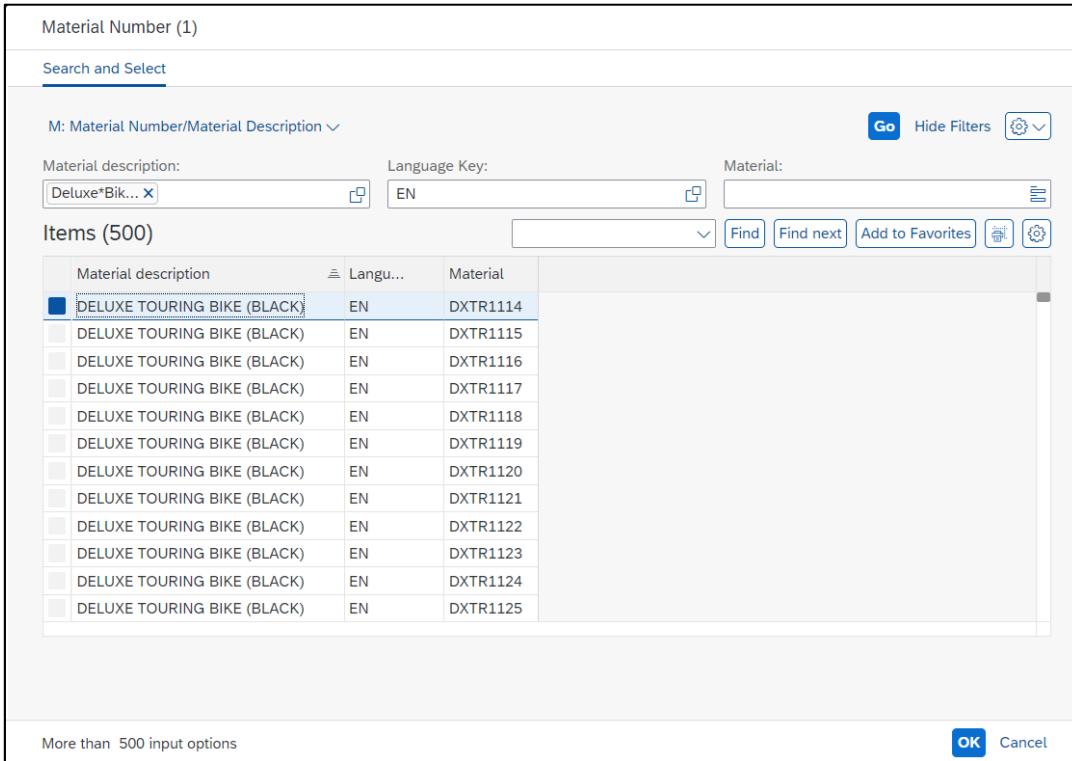
For example:

Character	Searches for everything
z*	Starting with z
*sale*	Containing the character string <b>sale</b> , such as <b>rvsale07</b>
*f+	Containing an <b>f</b> as the second-to-last character, such as <b>rmlogifa</b>
rp+++sch	Starting with <b>rp</b> , ending in <b>sch</b> , and containing any three characters in between, such as <b>rp012sch</b> or <b>rpinvsch</b>

18. Type **Deluxe\*Bike\*** in the **Material description:** field to display all **materials** with a **Material Description** that includes the words **Deluxe** and **Bike**.

19. Click  in the dialogue box to accept this option and display the search results.

There are a number of products that satisfies the Matchcode.



The screenshot shows a SAP S/4HANA search dialog box titled "Material Number (1)". The search term "Deluxe\*Bik..." is entered in the "Material description" field. The results table displays 500 items, with the first item selected: "DELUXE TOURING BIKE (BLACK)" with material number DXTR1114. The dialog includes buttons for "OK" and "Cancel".

Material description	Langu...	Material
DELUXE TOURING BIKE (BLACK)	EN	DXTR1114
DELUXE TOURING BIKE (BLACK)	EN	DXTR1115
DELUXE TOURING BIKE (BLACK)	EN	DXTR1116
DELUXE TOURING BIKE (BLACK)	EN	DXTR1117
DELUXE TOURING BIKE (BLACK)	EN	DXTR1118
DELUXE TOURING BIKE (BLACK)	EN	DXTR1119
DELUXE TOURING BIKE (BLACK)	EN	DXTR1120
DELUXE TOURING BIKE (BLACK)	EN	DXTR1121
DELUXE TOURING BIKE (BLACK)	EN	DXTR1122
DELUXE TOURING BIKE (BLACK)	EN	DXTR1123
DELUXE TOURING BIKE (BLACK)	EN	DXTR1124
DELUXE TOURING BIKE (BLACK)	EN	DXTR1125

20. Click **Deluxe Touring Bike (Black)** (any one) to select it.

21. Click **OK** in the dialog box to accept this option and to move to the next screen.

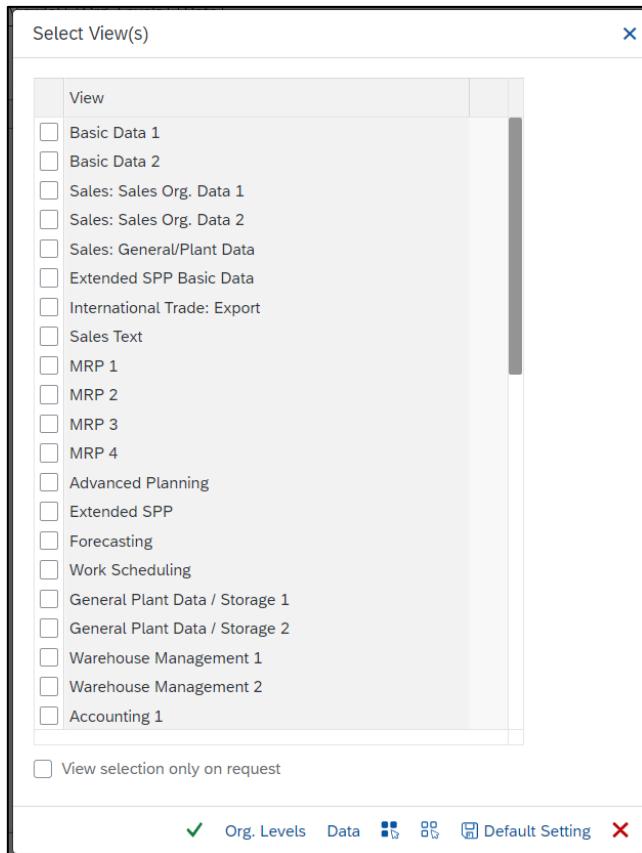
Notice that the ERP system has automatically places the **material number** in the **Material** field.

☞ *What is the **Material Number** for the **Deluxe Touring Bike (Black)**?*

Now that the relevant **Material Number** has been found, you can display the **Master Data** for the product.

22. Click **Continue** or press <ENTER>

The **Select Views** dialog box appears on screen. The **Material Master** stores a large amount of data about a Material depending upon which Business Scenarios it is involved in within the organisation. The costing data about a material would be of little interest to someone responsible for its storage in the warehouse. The **Select View** dialog box allows the user to select which data from the **Material Master** which will be displayed.

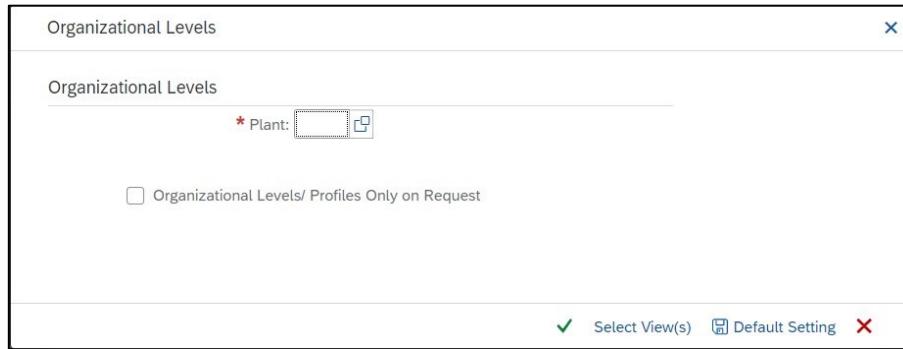


From this dialog box, it is evident that a large amount of information is available about a Material. We are going to assume that you are assigned to the Purchasing Department and therefore only require details relevant to this area.

23. Click  next to **Plant Stock** to select this view of the data. You will need to use the scroll bar to display the other possible views.

24. Click  or press <ENTER>

Often a Material may be used at more than one organisation levels in a large corporation or produced at different plants within a country or around the world. To display the material details which are relevant to you, an organisation level will need to be indicated.



25. Click **\*Plant** field to insert the cursor.

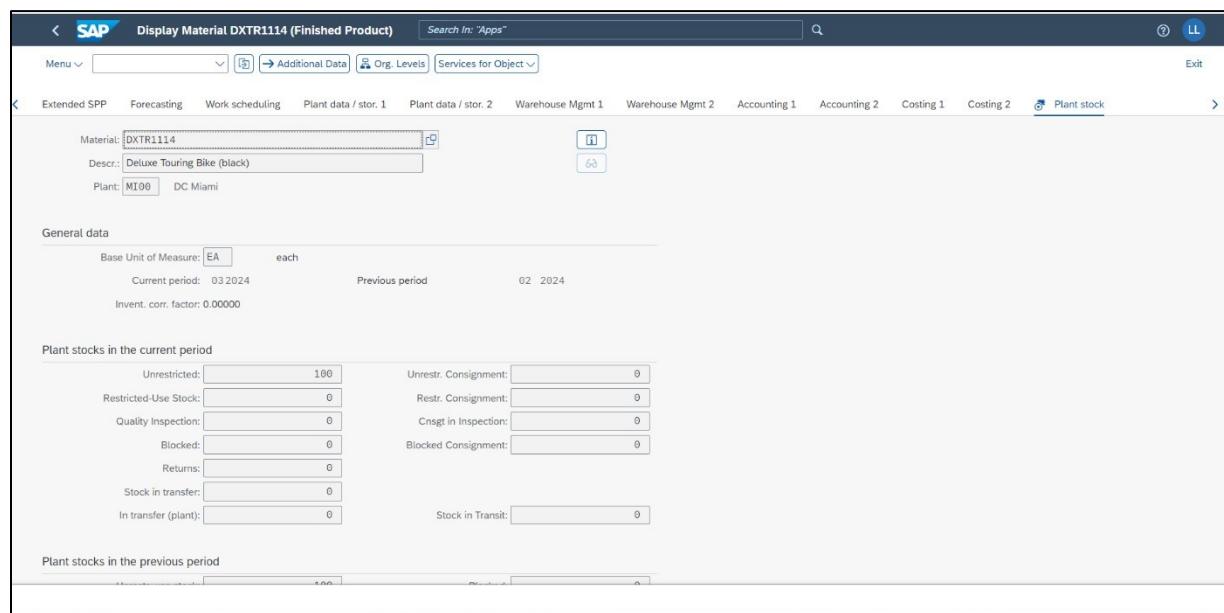
26. Click  to display a list of possible entries.

This displays the **Plants** that are responsible for the **Deluxe Touring Bike (Black)**.

27. Click **DC Miami** to select it. (M100)

28. Click **Choose** to insert automatically insert the **Plant** number in the **Plant** field.

29. Click  or press <ENTER> to display the **Material** details.





You can see from this screen the stock available for this **Material**. However, you would like to know the price which this bike sells for and its weight. This data is stored in the **Accounting 1** and **Basic Data 1** views.

You will notice that the required **Views** do not appear on the **View** toolbar. You can display the **Views** available by clicking on the toolbar

☞ What is the price and weight of the bike?

Price: .....

Weight:.....

30. Click to close this transaction and return to the Home screen.

#### SAP S/4HANA Reports

One of the major reasons a company implements an ERP system, like SAP, is to get up to date information about what is happening in the company. SAP S/4HANA includes a broad range of reporting functionality. The next exercise will look at an example of common reporting functionality.

Your manager has asked for details of sales since 2016 for East United States (UE00) sales organisation. The report is to include sale order details and total revenue. You are going to use an existing Fiori app in the Sales and Distribution Space to display this report. You will notice that Sales and Distribution does not appear on the Space Selection bar. To view all the available Spaces:

31. Click to display Spaces.

32. Choose **Sales and Distribution** to display the associated tiles.

The List Sales Orders app is not included in the Sales and Distribution Space. To customise the Space to add this app:

33. Click the **Profile** icon to display the menu

34. Click **Edit Current Page** to change the Space to edit mode

The List Sales Orders app needs to be added to the Sales Person Section.

35. Click **Add Tile** in the **Sales Person Section**.

The App Finder screen appears.

36. Click **GB SD** in the left pane to display apps related to Sales and Distribution.

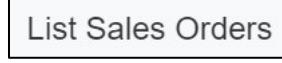
37. Click  in the List Sales Orders tile to add this app to the Sales and Distribution Space.

Notice the  changes to .

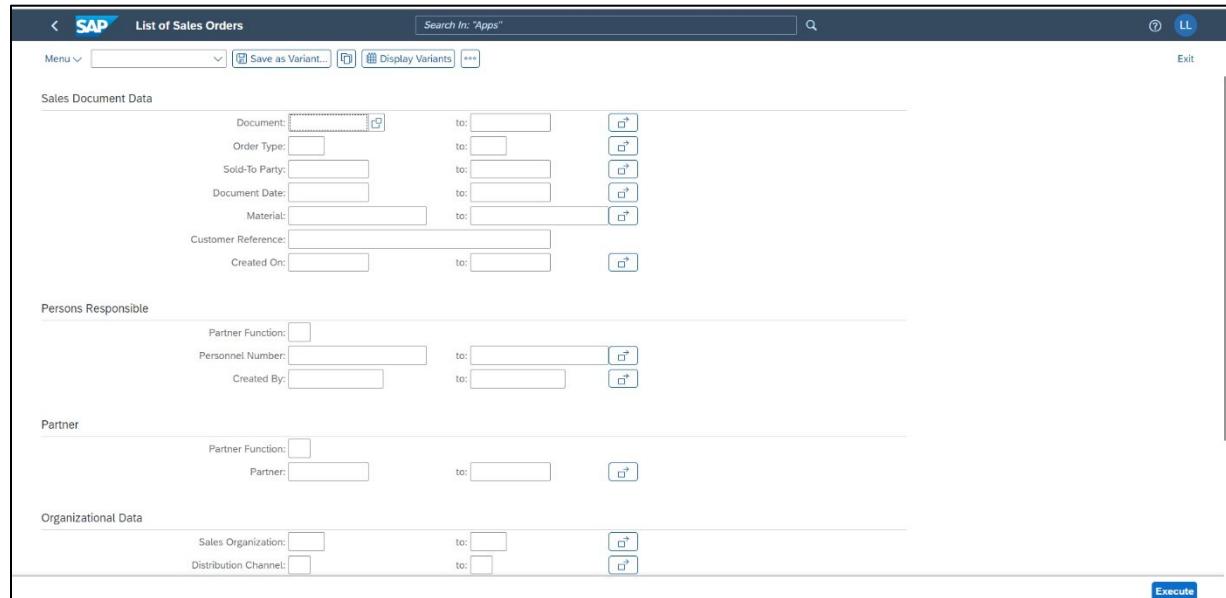
38. Click  until you return to the revised Sales and Distribution Space edit mode.

39. Click 

The Sales and Distribution Space now includes the List Sales Orders app under the Sales Person Role.

40. Choose  to display this report.

A screen appears which enables you to enter variables as **selection criteria** to help narrow the scope of the information required. As mentioned earlier, the information required pertains to sales orders since 01/01/2023.



To satisfy the report's requirements, you need to specify the date range.

41. Click the **Document Date** field to select it.
42. Type **01/01/2023** as the **date from**
43. Press **<TAB>** to move to the **date to** field.



44. Type today's date.

You now need to limit the data to the sales for East United States (UE00).

45. Click Sales Organisation field to select.

Notice that the icon appears in the field, enabling you to search for the required variable.

46. Click to display a list of available Sales Organisations.

47. Click **UE00** to select it.

48. Click to transfer the variable to the report selection screen.

You have now entered the required variables to filter the report data.

49. Click to run the report.

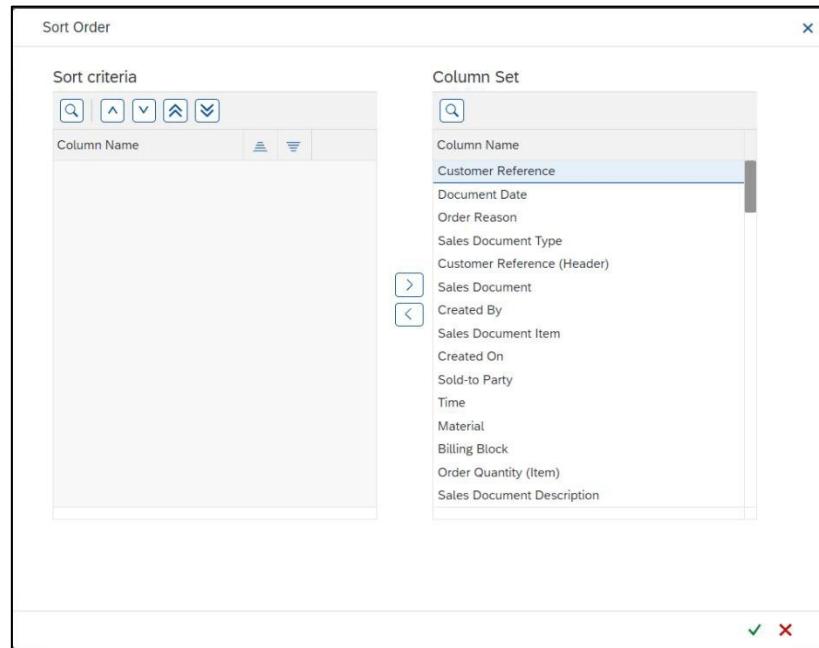
The report appears similar to the one below. Your report may have more data depending on more recent sales orders.

Customer Reference	Doc. Date	Sales Document Type	Sales Document	Item	Sold-to Party	Material	Order Quantity (Item)	Sal...	Net Value (Item)	Doc. Currency
Z997	08/23/2021	OR	3	10	129997	DXTR1997	8	EA	24,000.00	USD
Z999	08/23/2021	OR	2	10	129999	DXTR1999	2	EA	6,000.00	USD
Z998	08/23/2021	OR	1	10	129998	DXTR1998	5	EA	15,000.00	USD

### Sorting

To make the report more meaningful for your manager, you need to sort the Net Value of the orders from highest to lowest. This can be done by selecting the appropriate Sort icon from the **Application Toolbar**. The first icon is for ascending, while the other is order descending.

50. Click to display the Sort dialog box.



You want to sort by **Net Value (Item)**, so it needs to be transferred to the Sort criteria pane.

51. Click  **Net Value (Item)** to select this field (You may have to scroll down).

52. Click  to transfer this field to the search criteria.

Notice that radio buttons appear to give the option to sort either ascending  or descending .

53. Select  as the sort criteria.

54. Click  to apply the sort criteria to the report.

The report is now sorted by **Net Value (Item)**. Notice a small triangle appears in the column heading to indicate that it is part of the sort criteria. An alternate technique for performing a sort is by clicking the column heading of the field you want to sort and then clicking the appropriate **Sort** icon.

### Totals

You can perform a number of calculations on your reports to make them more meaningful. This can be done by clicking the **Total** button  on the **Application Toolbar**. For example, to determine total Net Value (Item) for all orders.

55. Click   to select this column.

56. Click  to perform the calculation.

Notice a new row appears with the total of this column.

	Net Value (Item)	Currency
	24,000.00	USD
	15,000.00	USD
	6,000.00	USD
.	<b>45,000.00</b>	<b>USD</b>

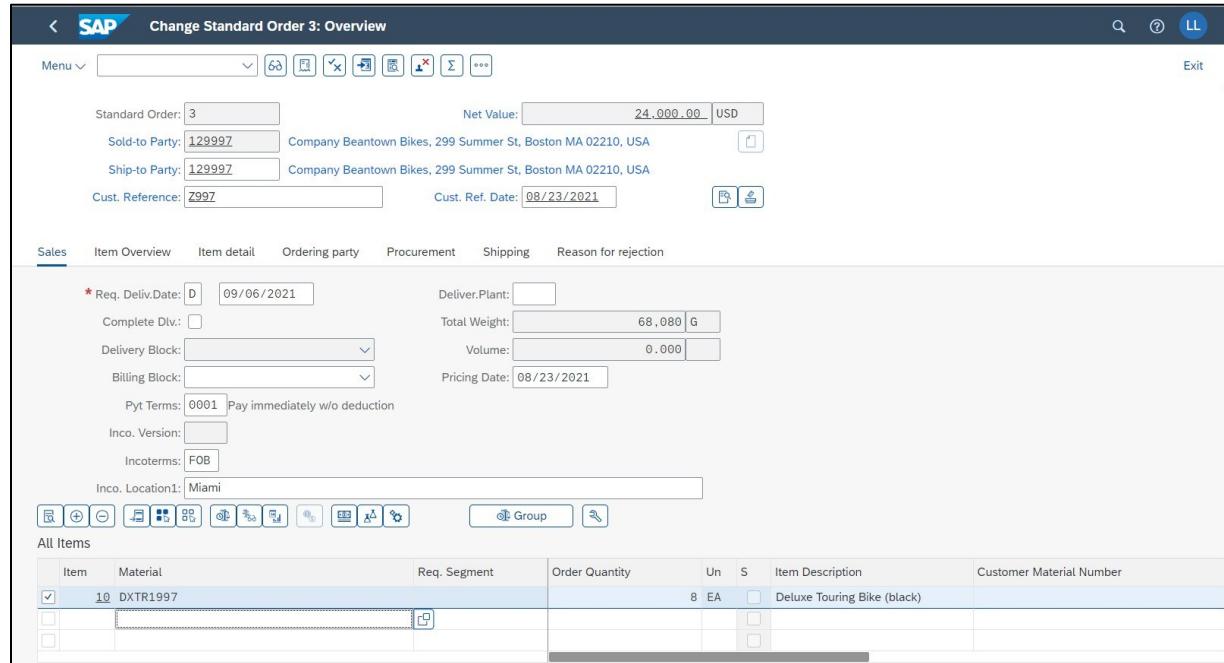
### Drilling Down

SAP S/4HANA provides the facility to **drill down** to get further details about any item on a screen. This is done by double clicking the item you to get more details about. For example, for shipping purposes, you would like to determine the weight of the materials in Sales Document 3.

Once you have viewed the further details, you can click the back button to return to the previous screen. At the moment, we have created a report for a specific time period. But the report only indicates a match code for the vendor rather than the vendor's details.

57. Double Click **Material DXTR1997** to view more details about this order's materials.

If an Information window appears, click "Continue". The order's details appear on the screen.



The screenshot shows the SAP S/4HANA Change Standard Order 3: Overview screen. The top navigation bar includes the SAP logo and a search bar. Below the header, there are several input fields for standard order details: Standard Order (3), Net Value (24,000.00 USD), Sold-to Party (129997, Company Beantown Bikes, 299 Summer St, Boston MA 02210, USA), Ship-to Party (129997, Company Beantown Bikes, 299 Summer St, Boston MA 02210, USA), Cust. Reference (Z997), and Cust. Ref. Date (08/23/2021). The main content area has tabs for Sales, Item Overview, Item detail, Ordering party, Procurement, Shipping, and Reason for rejection. Under the Sales tab, there are fields for Req. Deliv. Date (09/06/2021), Deliver. Plant (empty), Total Weight (68.080 G), Volume (0.000), Complete Div. (unchecked), Delivery Block (empty), Billing Block (empty), Pricing Date (08/23/2021), Pyt Terms (0001, Pay immediately w/o deduction), Inco. Version (empty), Incoterms (FOB), and Inco. Location (Miami). At the bottom, there is a toolbar with various icons and a table titled 'All Items' showing a single row for Item DXTR1997 (Material, Req. Segment, Order Quantity 8 EA, Item Description Deluxe Touring Bike (black), Customer Material Number empty).



The weight (68,080g) of the combined materials is displayed (you may need to use the scroll bar to make this field visible). Drilling down is a very powerful feature which you should familiarise yourself with.

58. Click to return to the report.

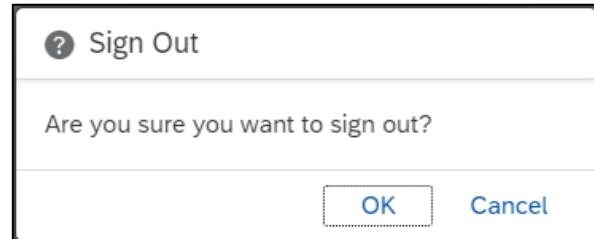
### Logging Off

It is important that when you have finished working with SAP S/4HANA that you log off correctly. This will protect data, but more importantly, it will prevent others from unlawfully using the system under your name.

59. Click **Profile** icon on the **Title bar** to exit SAP ERP.

60. Click **Sign Out**

A dialog box appears asking to confirm your actions:



61. Click to exit the system.

You have now completed the introductory tutorial for SAP ERP: S/4HANA. As you become more familiar with the system, you will find alternative ways of doing things. We have only covered the basics, and there is a lot more to learn.

### Summary

☞ There were a number of new ERP terms you were introduced to throughout this exercise. These are important to understand.

- Master data
- Material Master
- Transaction
- Drill down
- Match code
- Vendor
- Wildcard
- Client
- Organisational Unit