Cloud:

The term Cloud refers to a network of remote servers that can access by individual users or companies through Internet. The cloud can provide services over various types of networks like on Public Networks or on Private Networks i.e. WAN – Wide Area Network, LAN – Local Area Networks.

Applications such as Email, Web Conferencing, and Customer Relationship Management (CRM), all run in the cloud.

Benefits of Cloud Computing in Salesforce

Cloud computing offers various technical benefits that can revolutionize how businesses operate and deploy their IT resources.

Here are some key technical advantages of cloud computing:

- Disaster Recovery and Redundancy: Cloud providers often offer built-in disaster recovery solutions and data redundancy across multiple data centers. This ensures data resilience and minimizes the risk of data loss due to hardware failures or outages.
- Security Enhancements: Many cloud providers offer robust security features, including encryption, access controls, and authentication mechanisms. Leveraging these features can enhance the overall security posture of applications and data.
- Continuous Integration and Deployment: Cloud environments support continuous integration and deployment practices, allowing developers to easily push code changes and updates while maintaining quality and reliability.
- Scalability: Cloud services provide on-demand scalability, allowing businesses to easily scale up or down based on resource requirements. It ensures optimal performance during peak periods while avoiding over-provisioning during quieter times.
- Resource Utilization: Cloud computing enables efficient resource utilization through virtualization. Multiple virtual instances can run on a single physical server, maximizing the use of hardware resources and reducing waste.
- Flexibility: Cloud platforms offer a wide range of services and tools, allowing businesses to choose the best-suited options for their specific needs. This flexibility enables custom configurations and tailored solutions.

- Automated Provisioning: Cloud environments enable automated provisioning of resources, reducing the time and effort required to set up new servers, databases, and other infrastructure components.
- Rapid Deployment: Cloud services enable rapid deployment of applications and services. Developers can take advantage of pre-configured templates and automation tools to accelerate the development and deployment process.
- Global Accessibility: Cloud services are accessible from anywhere with an internet connection, facilitating remote work, collaboration, and access to applications and data across different geographic locations.
- Innovation and Experimentation: Cloud computing provides access to cutting-edge technologies like AI, machine learning, and big data analytics. This encourages innovation and experimentation without the need for significant upfront investments.
- Elasticity: Cloud platforms allow dynamic resource allocation, automatically adjusting resources to match workload fluctuations. This elasticity optimizes performance and minimizes response time.

By unlocking these technical benefits of cloud computing in Salesforce, businesses can enhance operational efficiency, increase agility, and access advanced technologies that drive innovation and growth.

How Does Cloud Computing Work in Salesforce?

Cloud computing in Salesforce, at its core, revolves around providing on-demand access to its CRM tools and resources. Salesforce manages the backend infrastructure, including servers, databases, and networking, while users access the services through web browsers or mobile apps. This reduces the burden of managing complex IT infrastructure and allows users to focus on their core business activities.

1. Multi-Tenancy Model

Salesforce employs a multi-tenancy architecture, where a single instance of the software serves multiple users or tenants. Each tenant's data is logically separated and secured, ensuring data isolation and privacy.

2. Layers of Salesforce Architecture:

- Presentation Layer: It is the user interface layer where users interact with Salesforce through web browsers or mobile devices. The layer includes Lightning components, Visualforce pages, and the Lightning Experience interface.
- Logic Layer: This layer, also known as the application layer, defines how data is processed and manipulated. It includes Apex code (server-side) and Lightning Web Components (client-side).
- Data Layer: This layer's main function is to store and manage data. Salesforce uses a relational database to store data, including standard and custom objects, fields, relationships, and data security settings.
- Integration Layer: This layer's main function is to communicate between Salesforce and other external systems, applications, and services. It includes APIs, connectors, and middleware for data synchronization and integration.

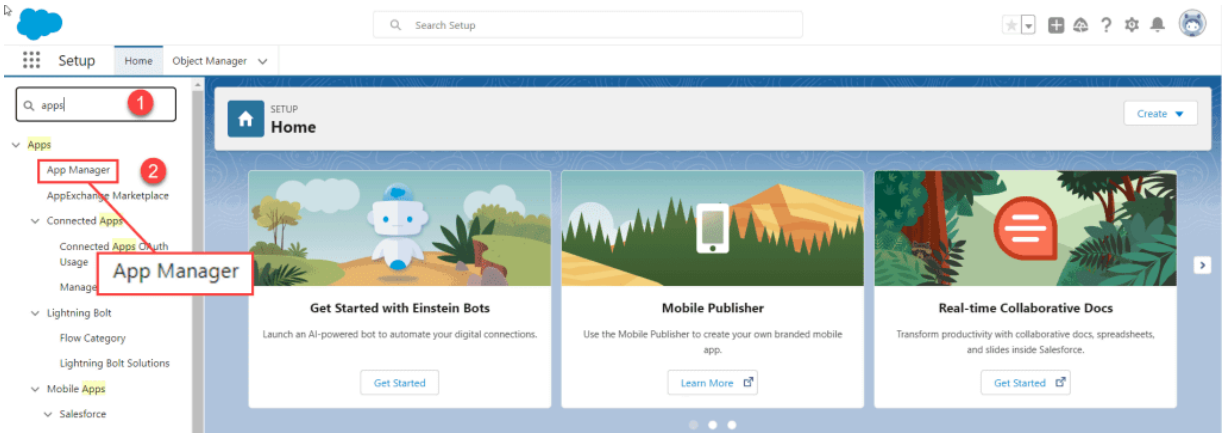
3. Data Model:

- Salesforce uses a schema-based data model where data is organized into objects (tables) that have fields (columns) and relationships.
- Objects are divided into standard objects (provided by Salesforce) and custom objects (created by users).
- Relationships include Master Detail, Lookup, and many-to-many relationships using junction objects.

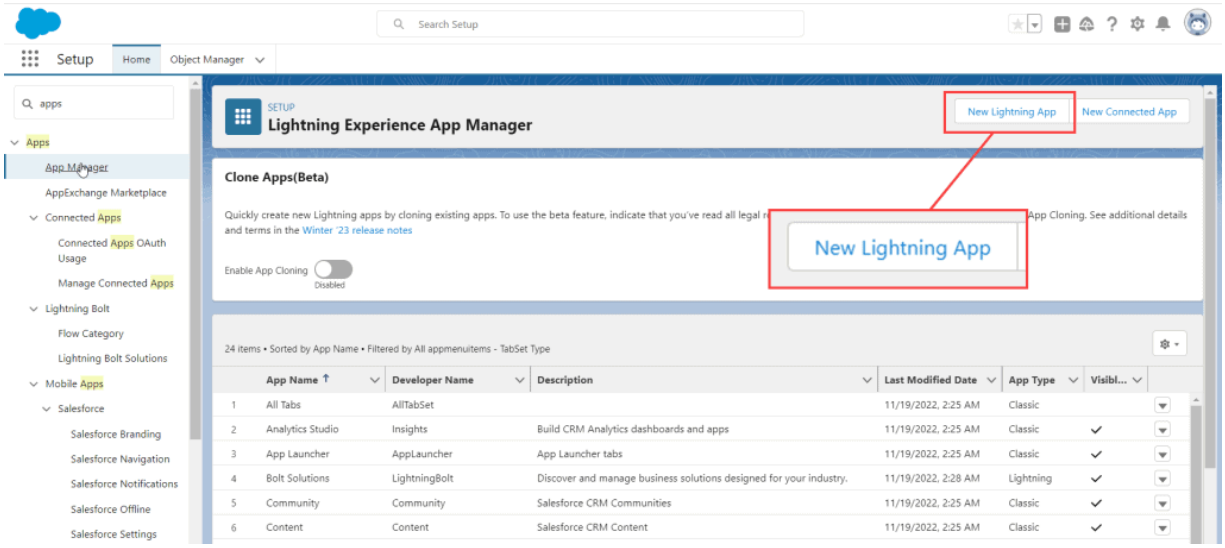
How to Create Application in Salesforce

Follow the below-given steps to create our own first salesforce app.

1. Enter **Apps** in the Quick Find search box and select **App Manager**.

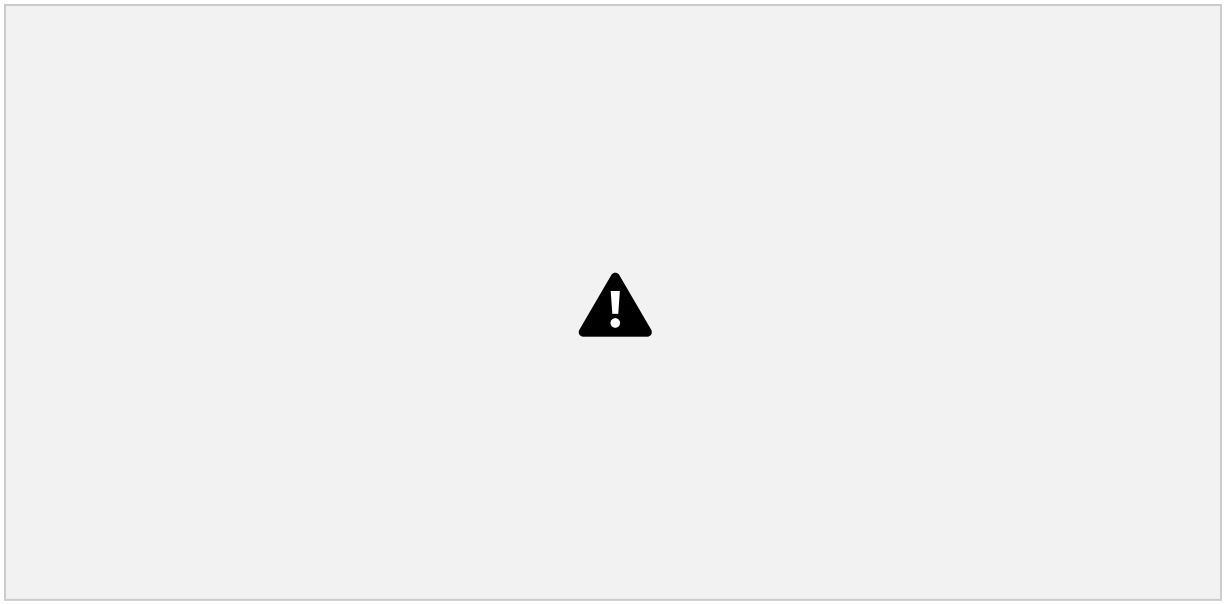


2. Click on the **New Lightning App**.

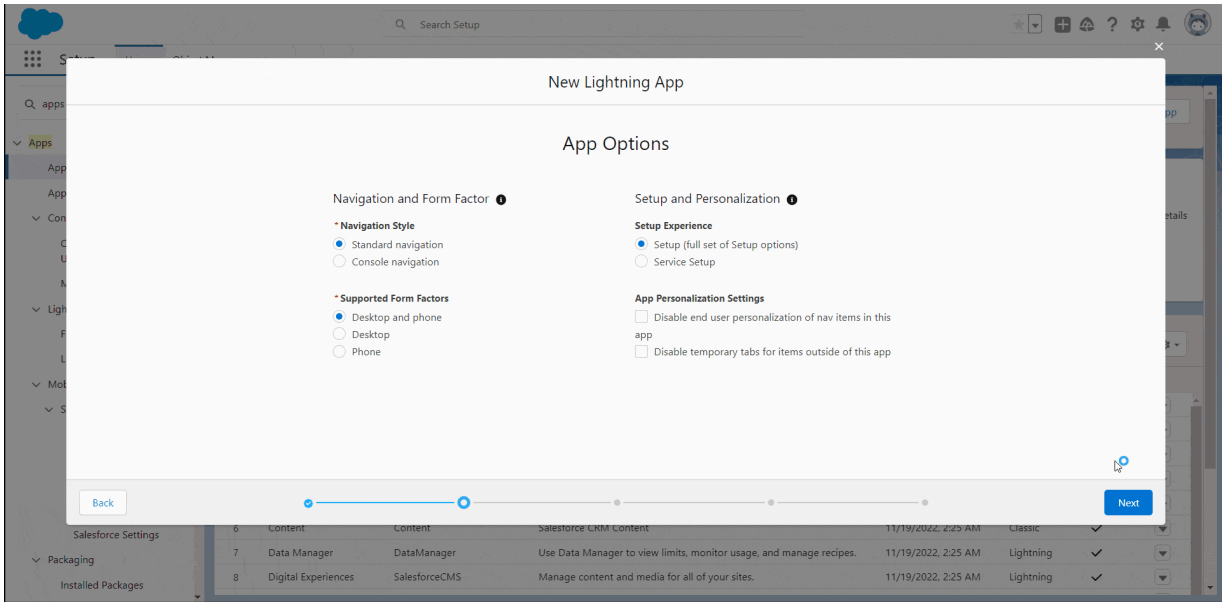


3. Provide the App Name and the Developer Name is automatically populated. If you want to give a description of the application, add it to the Description. If you want to change the log of the application and do the branding, **Upload the Image**.

You can also change the color of the default logo by changing the **Primary color Hex Value**.

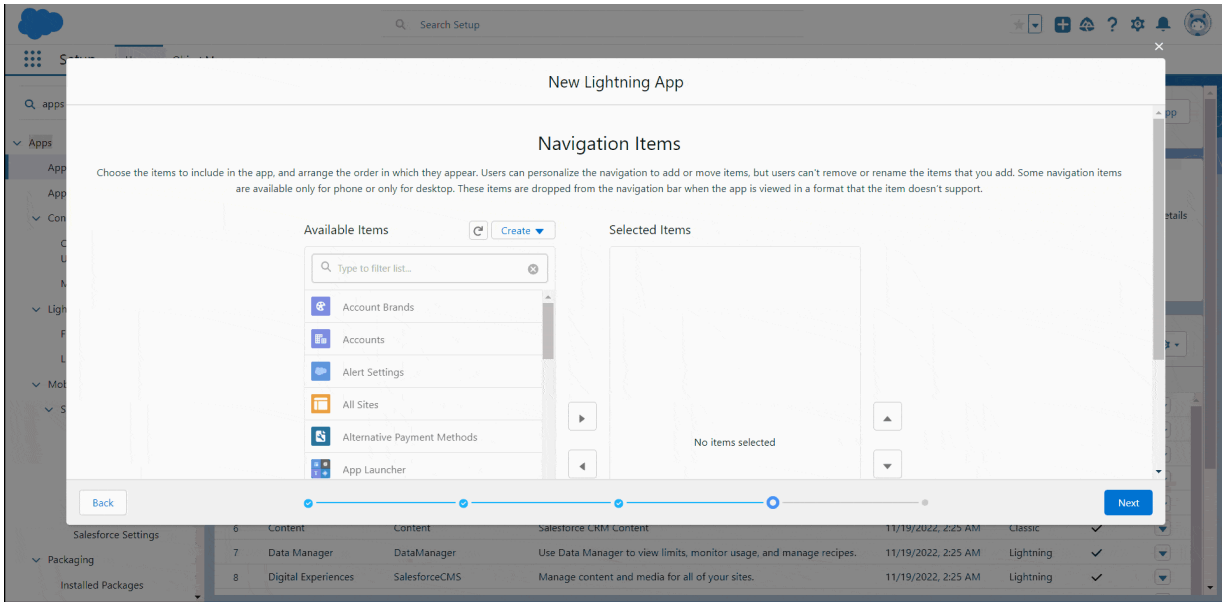


4. Click on the **Next** button, Set Utility Bar Alignment as Default, and click on **Next**.

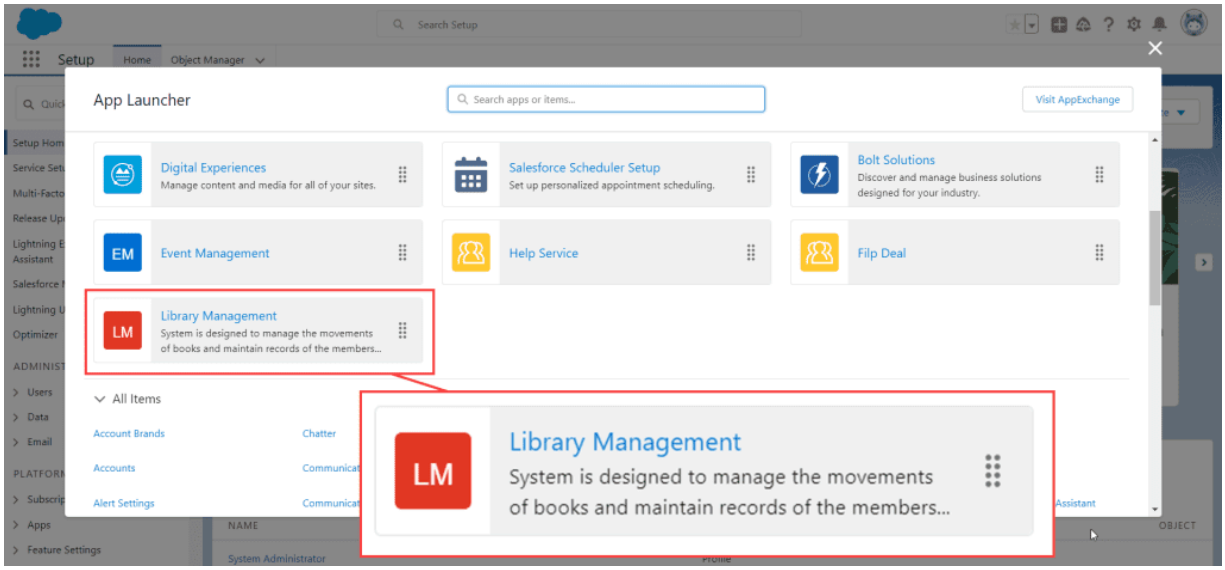


5. Select the **standard objects** from the **Available Items** and transfer them to **Selected Items** with the help of the arrow. Click on **Next**. Select the **profile** for our application. By default, salesforce is assigned us a System Administrator profile.

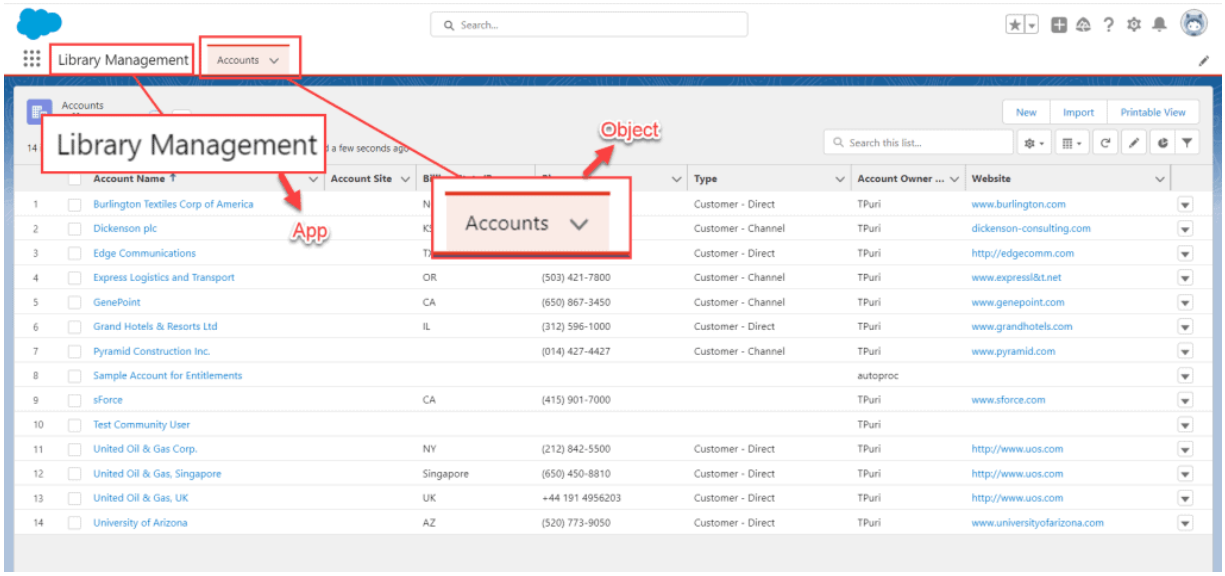
So, we will move the **System Administrator** profile from **Available Profiles** to **Selected Profiles**. Select **Save & Finish**.



6. You can see the application you have create by clicking on the App Launcher and then on **View All**.



7. Open the newly created custom app, which contains the standard object accounts.



With this, we have learned to create an app in salesforce.

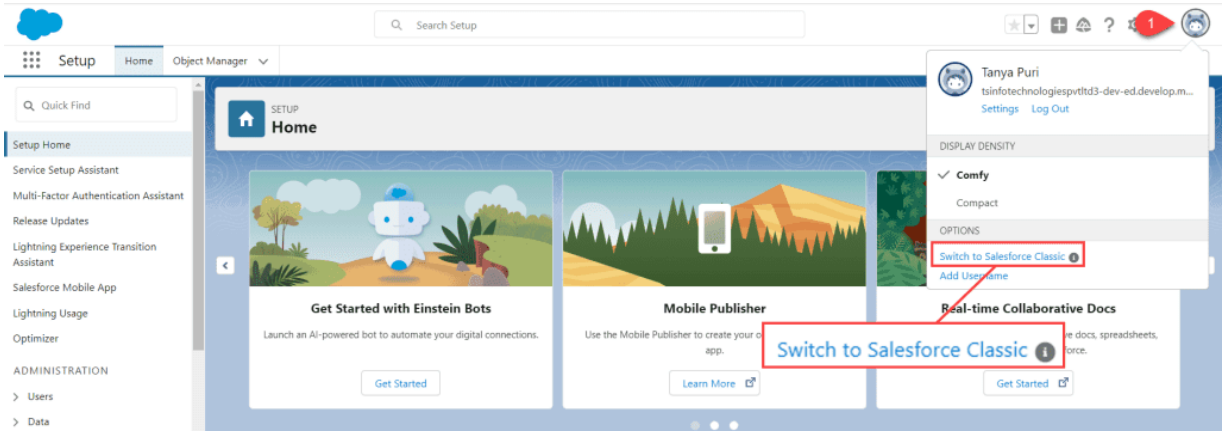
Read How to Create Records in Salesforce

Create a New App in Salesforce Classic

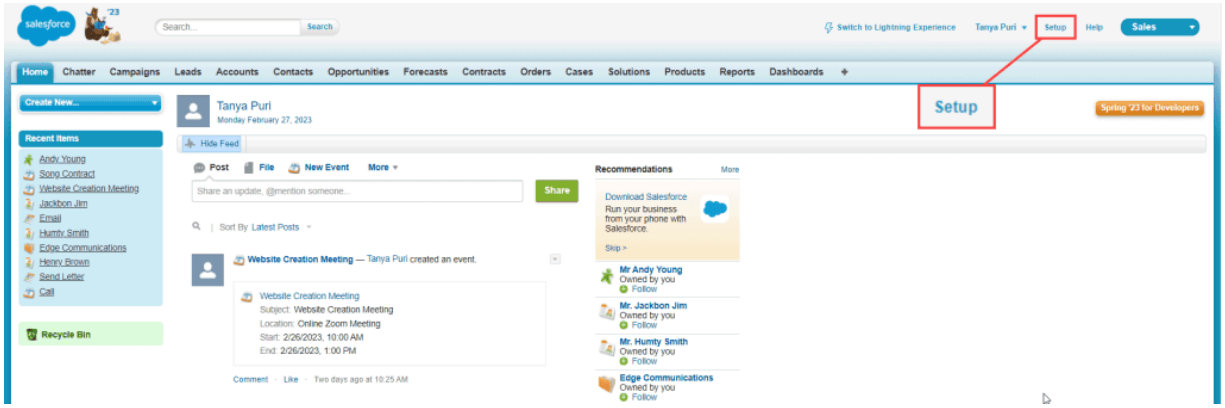
Create a New APP in Salesforce Classic using the shortcut method

Follow the below-given steps to build our own first salesforce app in classic mode using Quick Start.

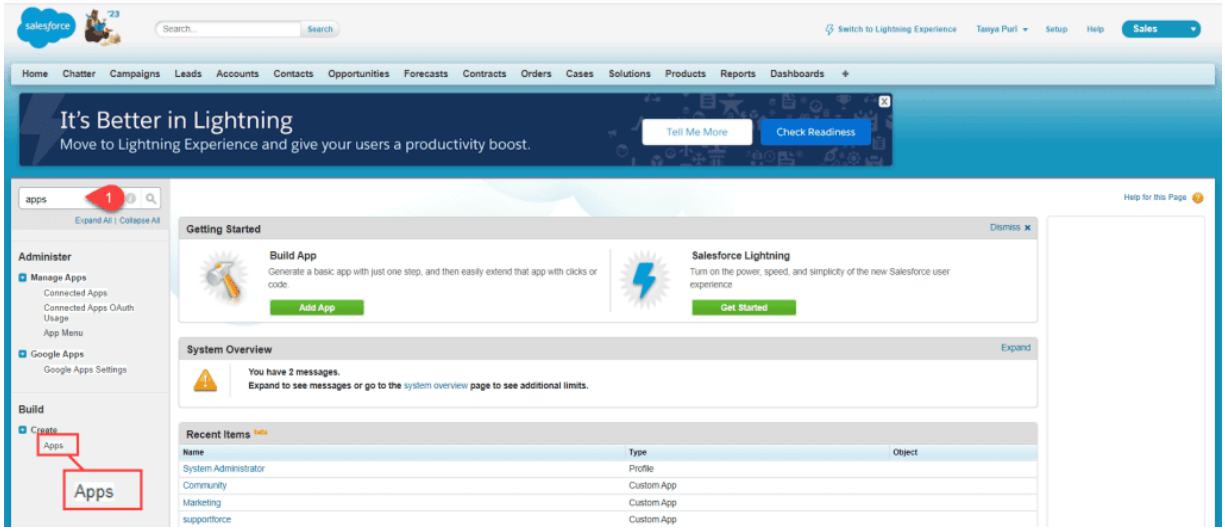
1. Click on avatar and select **Switch to Salesforce Classic** first.



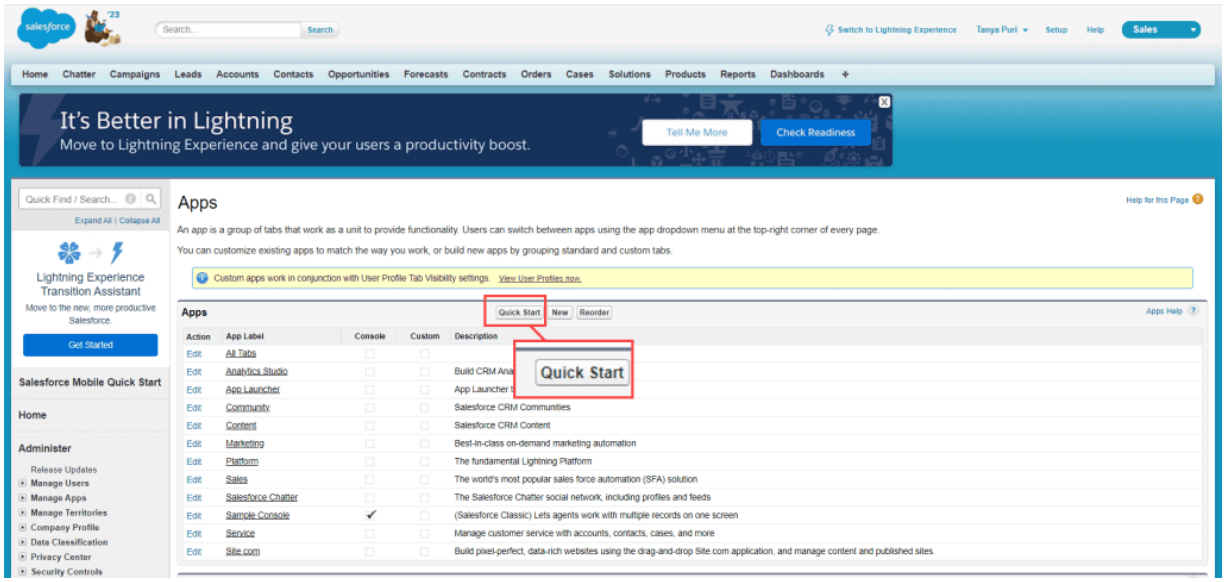
2. Click on **Setup** Option.



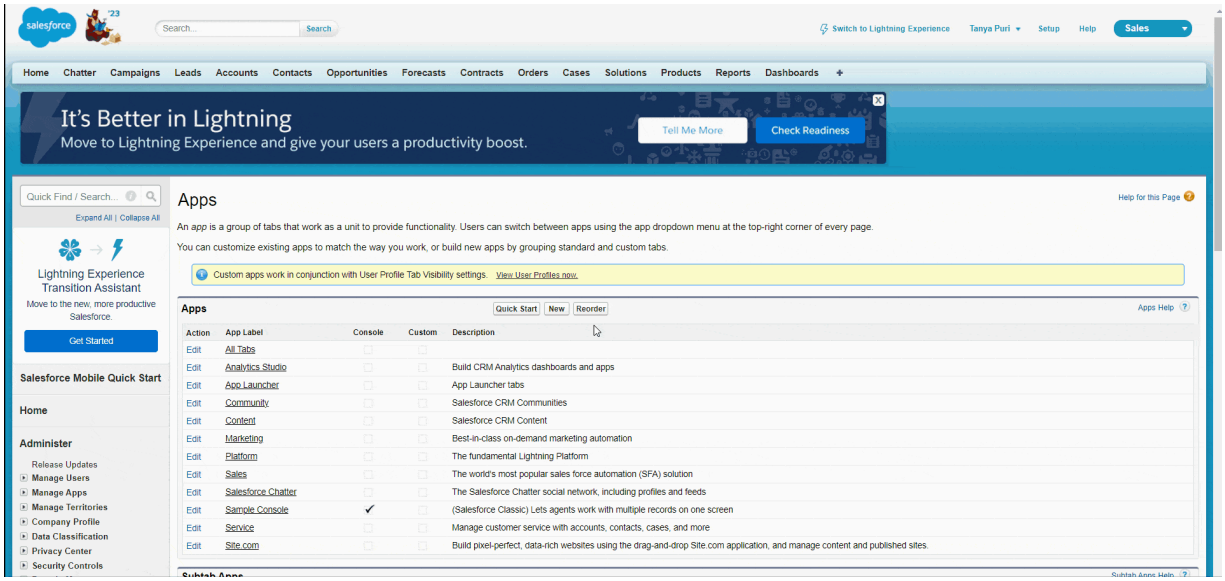
3. There is no need to navigate every time; enter the keyword **apps** in the **Quick Find Box**. Click on **Apps** located under **Create**.



4. Click on the **Quick Start** button.

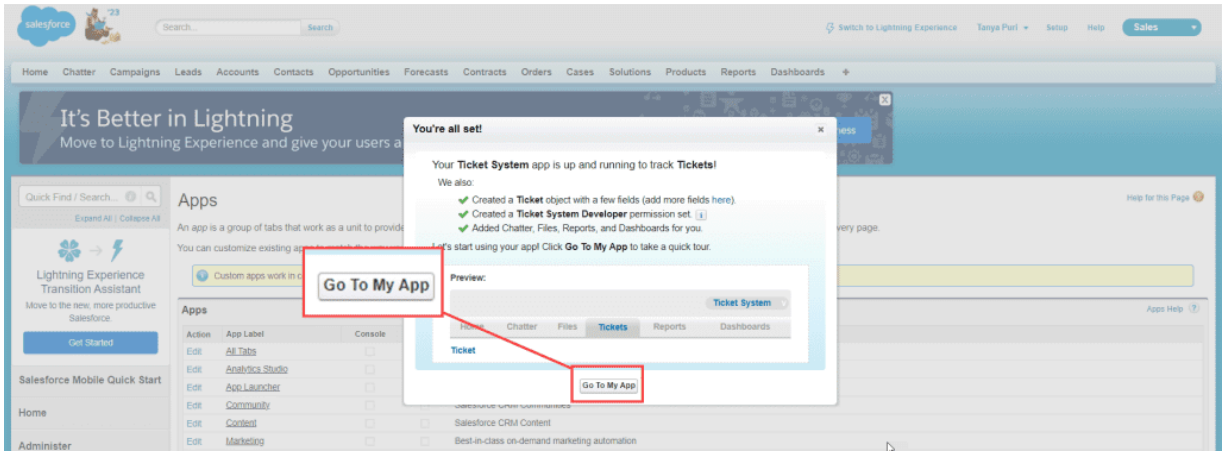


5. The window will pop up; now, enter the App Name, App Label, and Plural Name. Finally, click on **Create**.

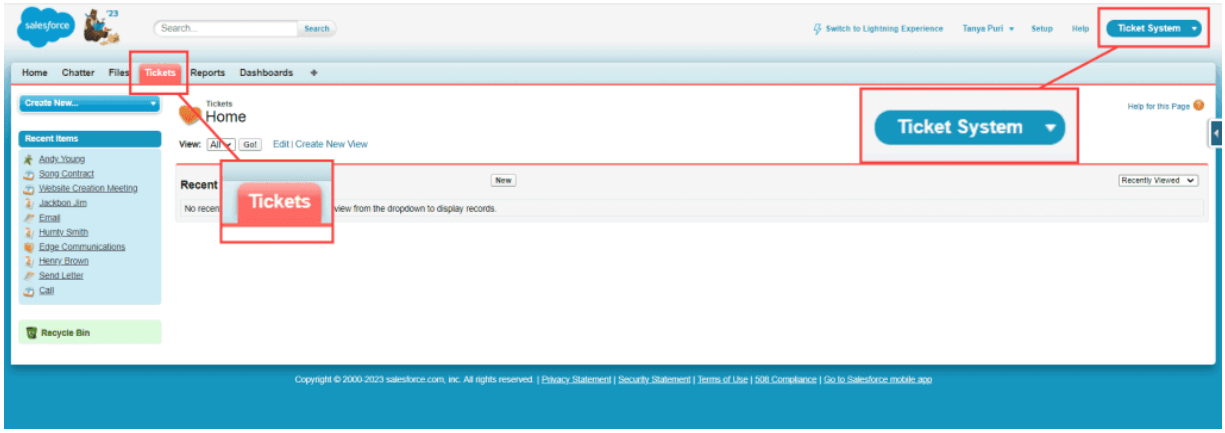


Labels *that are displayed in applications are those that are visible to end users.* ***App Name*** *are mostly used by developers for back-end and programming purposes.*

6. Click on **Go To My App**.



7. It will open the newly created custom app.

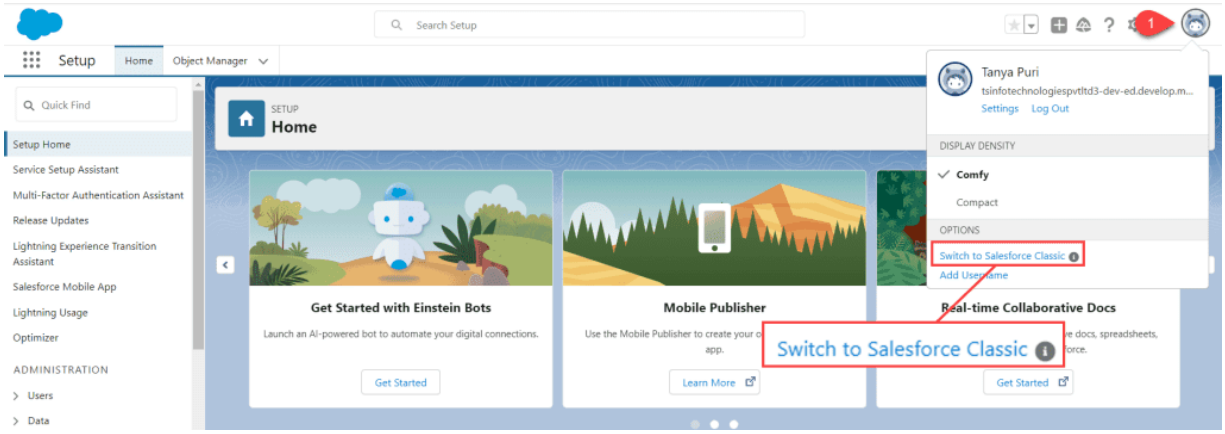


Read How to Create a Custom App Page in Salesforce Lightning

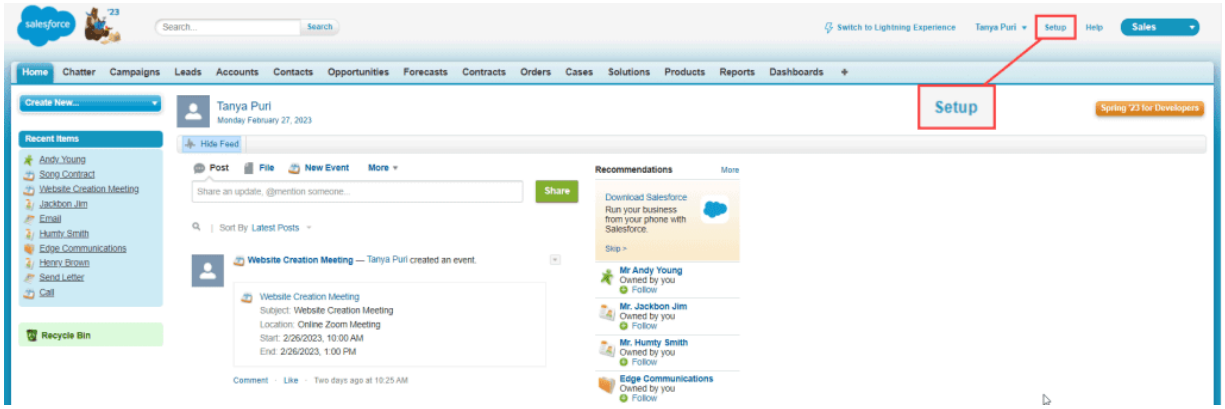
Create a New APP in Salesforce Classic using the complete method

Follow the steps given below to create our own first salesforce app in classic mode using New.

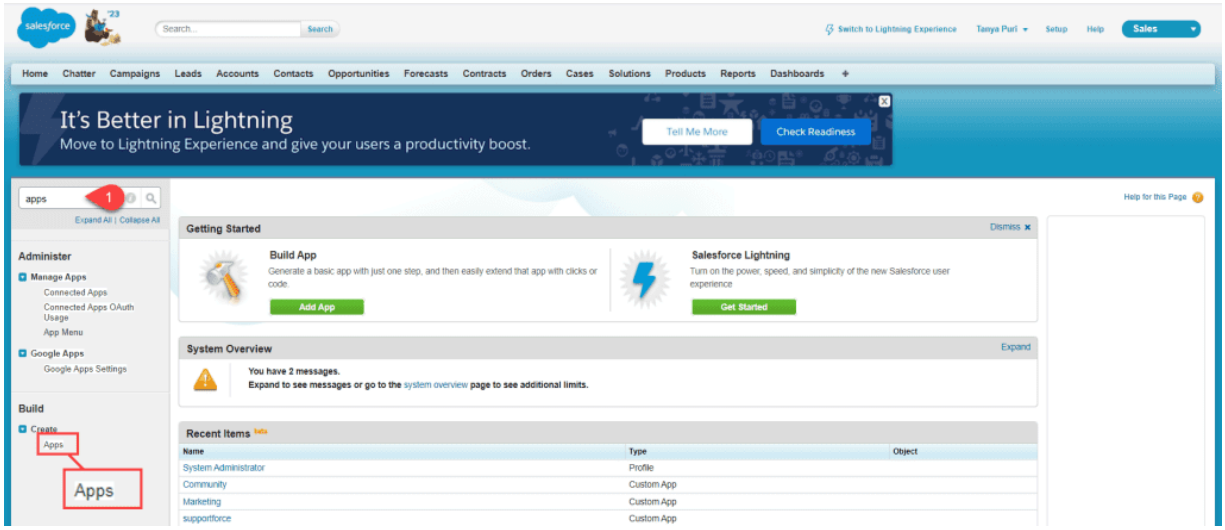
1. Click on avatar and select **Switch to Salesforce Classic** first.



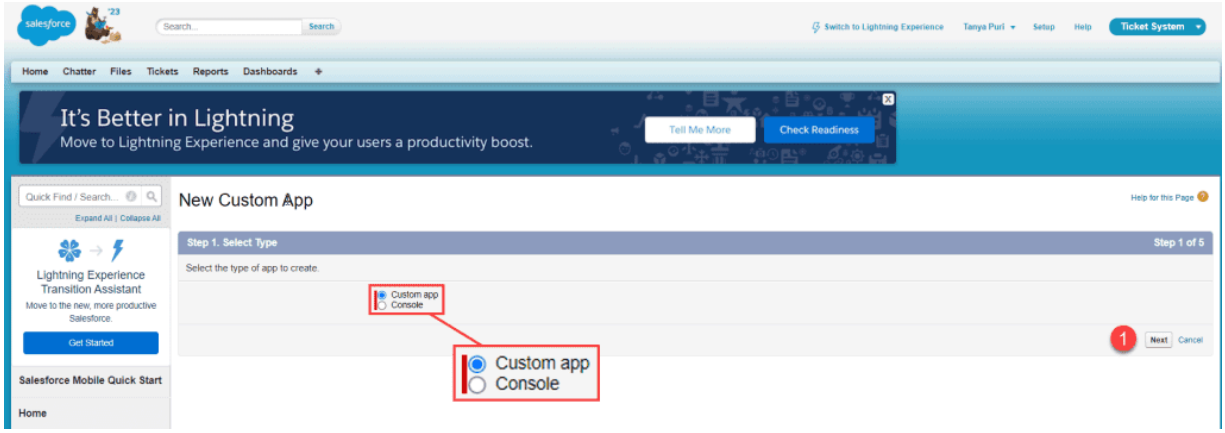
2. Click on **Setup** option.



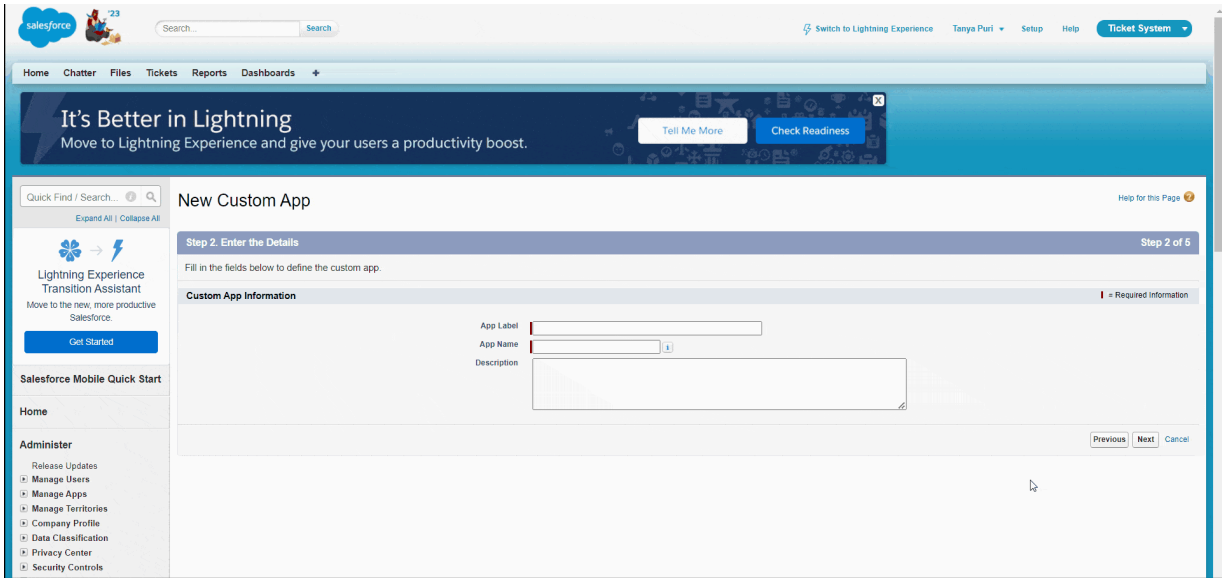
3. There is no need to navigate every time; enter the keyword apps in the **Quick Find box**. Click on **Apps** located under **Create**.



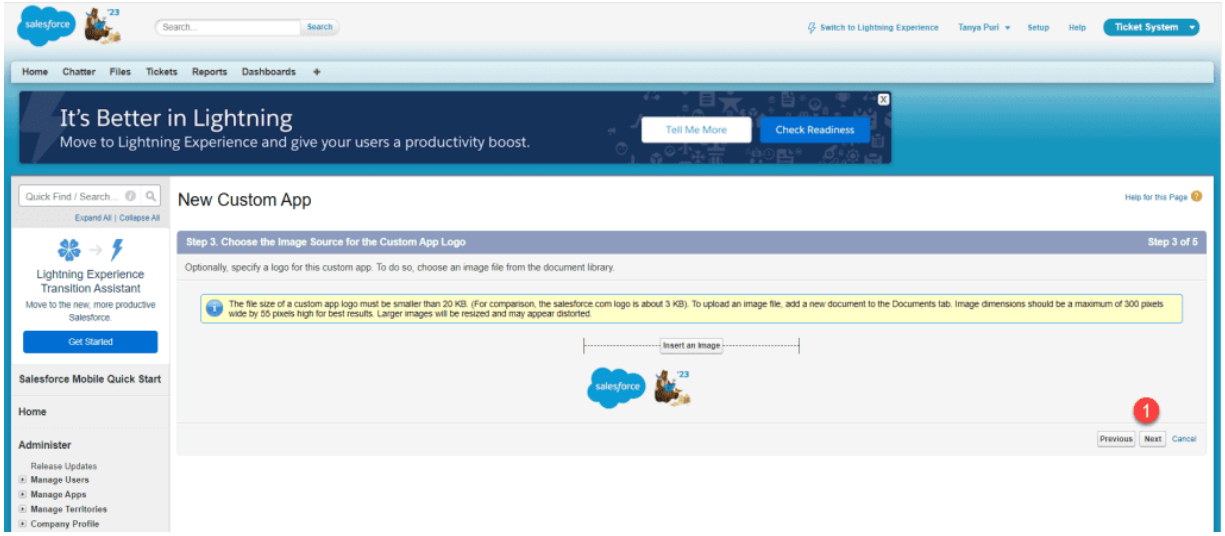
4. Select the type of app you want to create. Here, I select the **custom app** radio button. Then, click on **Next**.



5. Provide the app's label; the app name will be automatically populated. If you want to provide a more detailed description of the application, add to the **Description**. Then, click on Next.

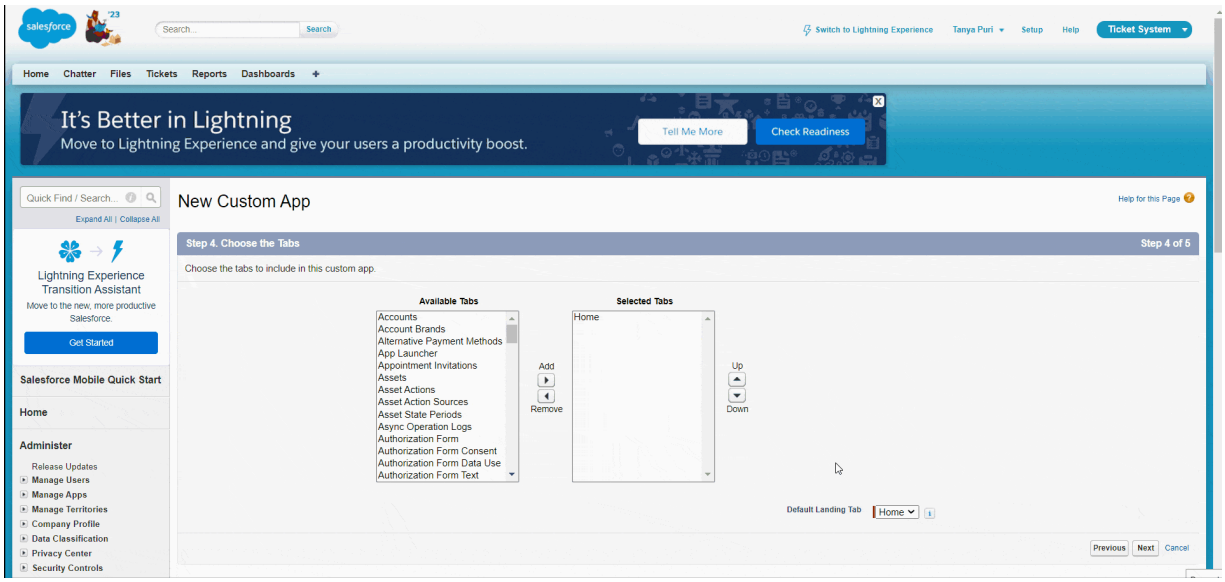


6. If you want to add the log to the application and do the branding, Insert an Image. But make sure the file size of the custom app logo is smaller than 20 KB. Then, click on **Next**.

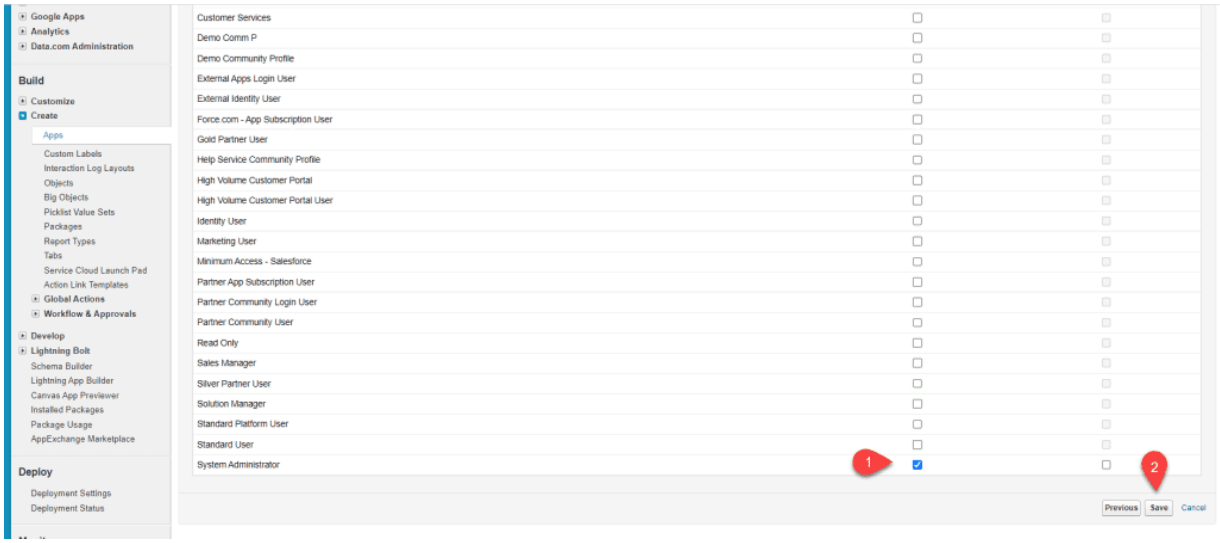


7. Now, choose the tabs that you want to include in your custom app. Select the specific tabs from the **Available Tabs** and move them to the **Selected Tabs**. Then, click on **Next**.

Note: By default, the Home Tab is always included in the custom app.



8. Click on the visible checkbox of the profile, in which you want to visible your new custom app. Then, click on **Save**.



9. Click on **+**, then on the **All Tabs** dropdown, and you can see that your new custom app is created here.

With this, we have learned to create an app in Salesforce Classic.

Conclusion

In this tutorial, we have learned how to create a custom ap