

Activity Diagram for Login and Registration

The UML activity diagram for login and registration shows how system activities move through the system. It is one of the methods used to document the system behavior in terms of activities and development.

Also, the activity diagram uses symbols to show how the login and registration process works as a whole. It is composed of **activities**, **decisions**, and **paths** (flows).

Login and Registration Activity Diagram: Details

The project details for the login and registration process are shown in the table. It has all of the information about the project.

Name:	Login and Registration Activity Diagram
Abstract:	The login and registration activity diagram represents the behavior of the project in terms of its activities. It contains the important details on the activities and constraints done in the project.
UML Diagram:	Activity Diagram
Users:	School Admin, Authorized Registrar Personnel, and Students or Registrees.
Tools Used:	Diagram tools that provide activity diagram symbols.
Designer:	Sourcecode.com

Activity Diagram for Login and Registration - Details

What are Login and Registration?

On the login page of a system, the user must make a username and a password. On the other hand, when you sign up for the system, you fill out a form that asks you other security questions. This security information changes based on what the owner of the system needs.

Registration and login serve to verify a user's identity before granting access to the system. To get access to the system, users will be required to provide personal information during registration. The system then stores this information, which serves as the foundation when users log in.

Define Login and Registration Activity Diagram

A UML login and registration activity diagram is a very efficient behavior diagram. This graphic illustrates the interaction between the system and its users. This is accomplished by assisting users in visualizing the operation of the system in varying degrees of detail.

The **activity diagram in UML** visually depicts a set of actions or control flows of the system's login and registration. It describes the processes in a [use case diagram](#). Its' illustration can also be sequential or concurrent.

In addition, the activity diagram may highlight challenging use cases (use case diagram) in order to simplify and enhance any process. It models the behaviors, functions, and processes of the system.

Importance of UML Activity Diagram

Utilizing an activity diagram requires defining the project's workflow with significant tasks. These actions are a consequence of user choices that result in enhanced engagement. In addition, it depicts the login and registration page's operations and control flows.

UML activity diagrams show the main operations and limitations of Login and Registration. Then, these activities produce a flow that should be included in the project. Each action was correctly labeled so that the system's behavior could be determined.

The activity diagram is one of the UML diagrams for Login and Registration. It also displays the dynamic behavior of the system. It illustrates the flow of communications between activities.

Activity Diagram: Benefits

The **Activity Diagram Benefits** are as follows:

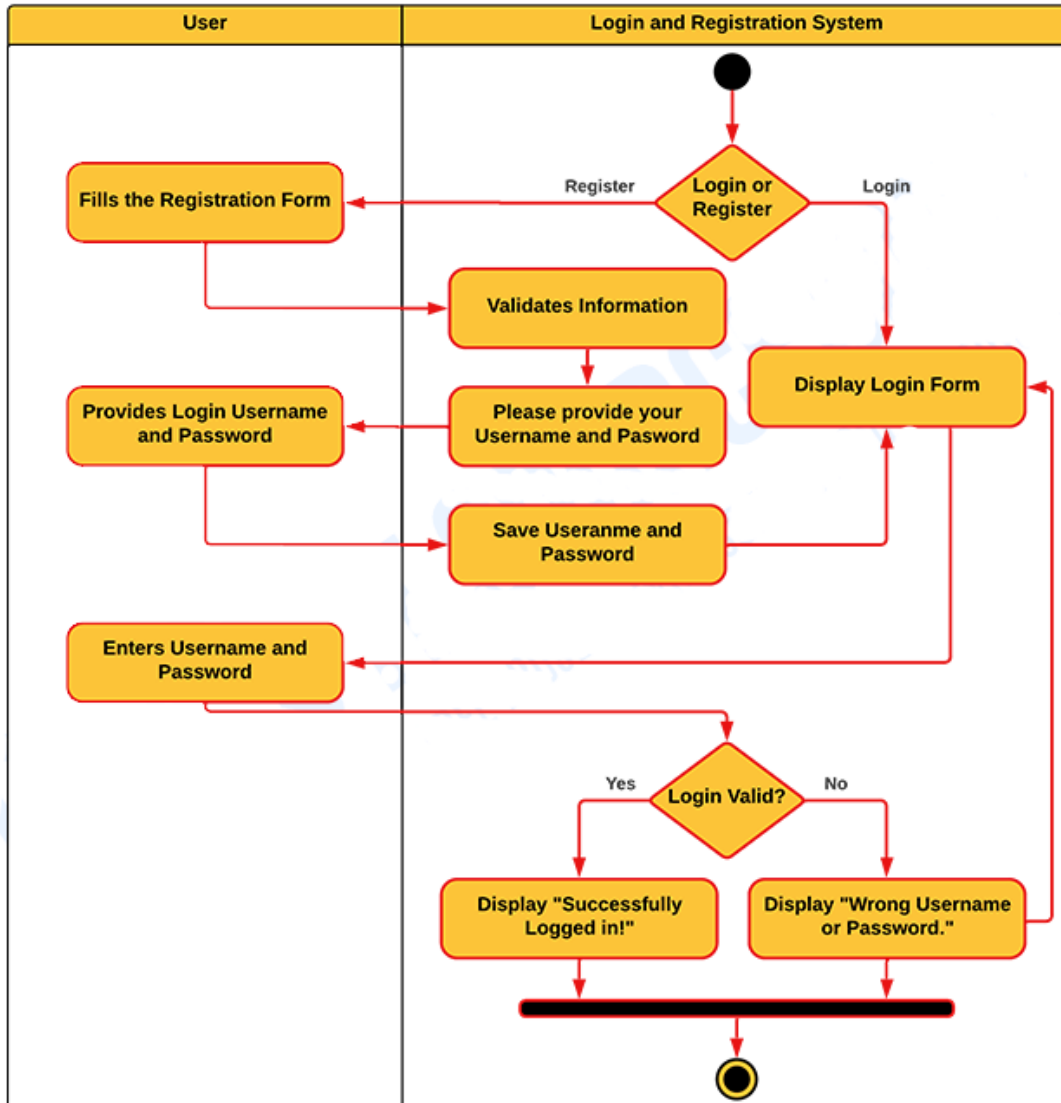
- Using an Activity Diagram, you can see how an algorithm works.
- It also talks about the steps a UML use case goes through.
- A process or workflow, it shows how users and the system work together.
- Clarify hard use cases to make a process easier to follow and better.

Login and Registration System Activity Diagram

The example of a Login and Registration System Activity Diagram shows how the system works. This example of an activity diagram with swimlanes is shown in detail to help programmers understand.

It figures out what a user does when they log in to a system. This example shows some of the things that happen when you book something online. So, the focus here was on the actions and choices that were made.

LOGIN AND REGISTRATION SYSTEM



ACTIVITY DIAGRAM

LOGIN AND REGISTRATION SYSTEM ACTIVITY DIAGRAM

We used the swimlane with two walls, as shown in the picture. The user lane is shown on the left. It goes over everything a user could do when using the system. Its lane also shows how far the user can go in what they do.

The system's goals and activities have now been moved to the right lane. This shows that the system responds to what the user does and how they do it. So, the system is made to be easy for the users to use.

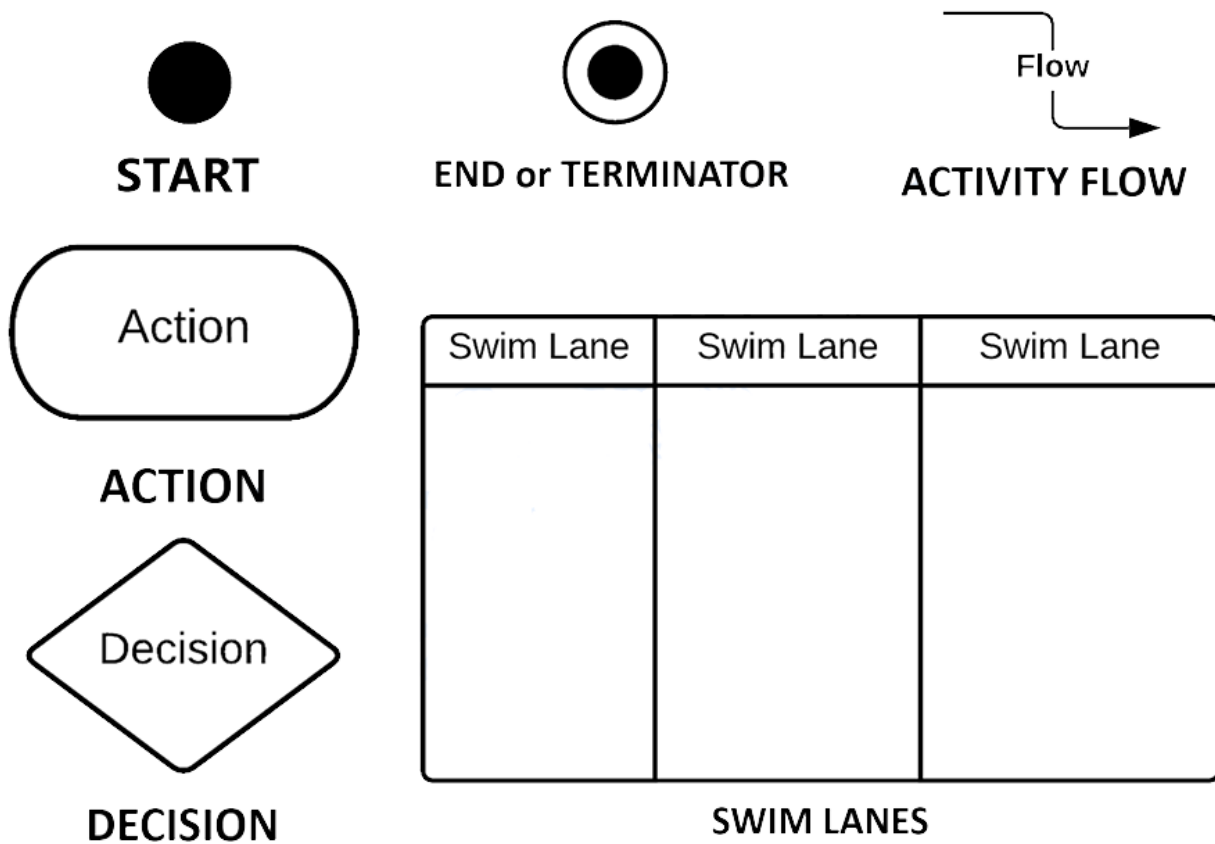
To access the system, the users must have their accounts logged into the software. The functions were then emphasized as the activities flow and the system and users communicate.

You can add to this, and how you make your activity diagram is up to you. But make sure you have accurate information and list the important choices (actions).

What are the Symbols used in Activity Diagram?

[Activity Diagram Symbols](#) - are used not just to draw an activity diagram, but also to emphasize the role of all that was included in the system's process. Each of the symbols was used to present a certain part of the system.

ACTIVITY DIAGRAM SYMBOLS



ACTIVITY DIAGRAM SYMBOL

- **Start** - is the beginning of the action. It uses a filled circle symbol to show its function.
- **Action** - is a stage of an activity in which users or software accomplish a certain task. Action is shown in Round-edged rectangles.
- **Decision** - symbolizes a conditional branch in the flow. It has two or more outputs and a single input. A diamond symbol presents this notation.
- **Swim Lanes** - are the lanes showing the actor's boundaries. The activities drew in the same lane considered as the organization's activities. Swim lanes must be in a logical arrangement.

- **Activity Flow** - is another name for the connectors in the diagram that illustrate the flow between processes (activity).
- **End (Terminator)** - is the last phase of the activity. An indicated black circle represents the final node.

Each of these activity diagram symbols shows the overall system behavior. Emphasizing the system's behavior would also be much easier by using these Activity Diagram symbols.

How to Draw an Activity Diagram?

Time needed: 5 minutes.

Here are the steps in developing (designing) the **activity diagram for login and registration**.

- **Step 1: Familiarize Activity Diagram Symbols**

Programmers must first become familiar with the symbols to build an activity diagram. This pinpoints the system's flow of interactions.

- **Step 2: Identify the flow of actions.**

After getting used to the symbols, you will need to figure out how the actions go from one to the next. Your use case diagram would show how things would happen.

Actions describe the order or series of things that happen when a user logs in and registers with a system. In an activity diagram, action is also a discrete unit of functionality. It also talks about what each step in a UML use case diagram looks like.

The control flow of data is shown by the incoming and outgoing activity edges of an action. When all of the input requirements are met, it starts to do what it needs to do.

- **Step 3: Add the Actors (users) involved.**

Actors do things to them, changing them into other things or changing how they are. This actor is something or someone outside of the system that interacts with the system.

We put labels on the swimlanes that say "actors" to show that the action or step was done by them or by the system. This will help readers and developers figure out how the system will work or how it will interact with actors or the other way around.

- **Step 4: Trace the flow of activities.**

To figure out how things work, you need to know that flows can be run, branch, or sequential.

Action or control flows help developers figure out how to move from one state of activity

to another. In this notation, there could be more than one action flow coming in or going out.

Also, the flow of activity is set by the control flow, and the inbound arrow starts a single activity step. After this step is done, the flow keeps going in the direction of the outgoing arrow. Object flow also talks about how objects (data) move through an activity.

Conclusion:

In conclusion, we have reviewed the definition of an Activity Diagram for Login and Registration as well as its development phases. This activity diagram serves as one of the techniques for developing the login and registration features of the system.

In addition, an activity diagram emphasizes the flow of activities inside the system and the interactions between users and the system.

Using an activity diagram in UML will help you not only understand the project but also see what options you have while designing it. This diagram works best with the other UML diagrams in the Recommended Articles. See also the Related Articles section below for more Activity Diagrams.