

# Using LavaSDK

## The Frontend

☹️ The Problem : Using private keys on the frontend without special provisions is inherently unsafe. In ordinary development scenarios, private keys from a user can be leaked through the browser.

✓ The Solution : Lava uses a unique solution called badges to solve these limitations. A badge consists of several parts and is used in lieu of a private key. It must, however, be signed by an external server that holds the relevant authorizing party's private key. The [default Badge Server](#) is hosted by Lava and requires no additional configurations.

Get Started : You can get started right from the [Lava Gateway](#) ! We recognize that a hosted solution is not ideal for every use case. Users who are interested in accomplishing the highest levels of decentralization may run their own [badge server](#) .

## ↪ Recommended Flow

Although you can host your own badge server, the easiest way to get started is through Lava's Gateway.

1. Sign up to the Gateway. [Register now](#)
2. if you haven't already!
3. Create a Project and Select your APIs!
4. Open an API and click LavaSDK.
5. Install the SDK into your project -> npm install @lavanet-lava-sdk
6. Copy & paste your code snippet into your code.

## Badges

### Usage ⚙️

Badges are objects passed to the SDK instance which allow a user to forgo the usage of private keys. A badge has the following format:

```
const myBadge =  
{ badgeServerAddress :  
  "https://badges.lavanet.xyz" ,  
  // Or your own Badge-Server URL projectId :  
  ""  
  //input your project ID from the Gateway or custom setup } ; A user can initialize the SDK using a badge instead of a  
  privatekey  
}  
  
const lavaSDK =  
await  
LavaSDK . create ( { badge : myBadge , chainID :  
  "LAV1" , rpcInterface :  
  "rest" , } ) ; And make calls all the same - no privatekeys exposed!  
  
const info =  
await lavaSDK . sendRelay ( { method :  
  "GET" , url :  
  "/node_info" , } ) ;
```

That's it. For most users, there is no additional information required to successfully use LavaSDK on the front end! [Edit this page](#) [Previous Backend Use](#) [Next Examples](#)