

# DIGITAL IDENTITY CHALLENGE

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# PROBLEM PREMISE

- **Students falsifying academic credentials for job applications is an escalating ethical concern**
- **Document forgery result in deserving and genuine candidates losing opportunities.**
- **Document forgery also brings a bad name to the issuing authority**



# EMAIL ID

AS

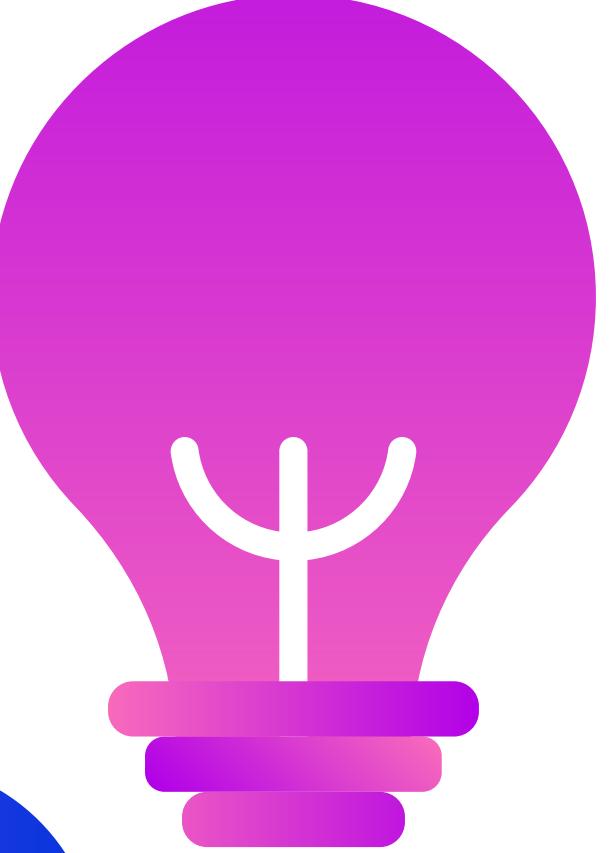
# DIGITAL IDENTITY



# SOLUTION

## Introducing DDocs (Digital Documents)

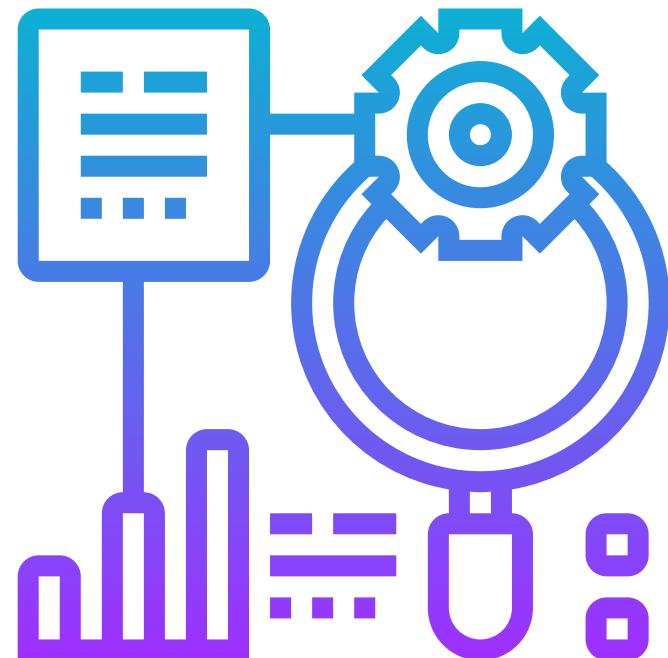
- Introducing an app to issue encrypted documents fortified by cryptography is a cutting-edge solution to combat document falsification.
- This advanced model swiftly detects any tampering with any parameters, ensuring the immediate identification of false submissions.



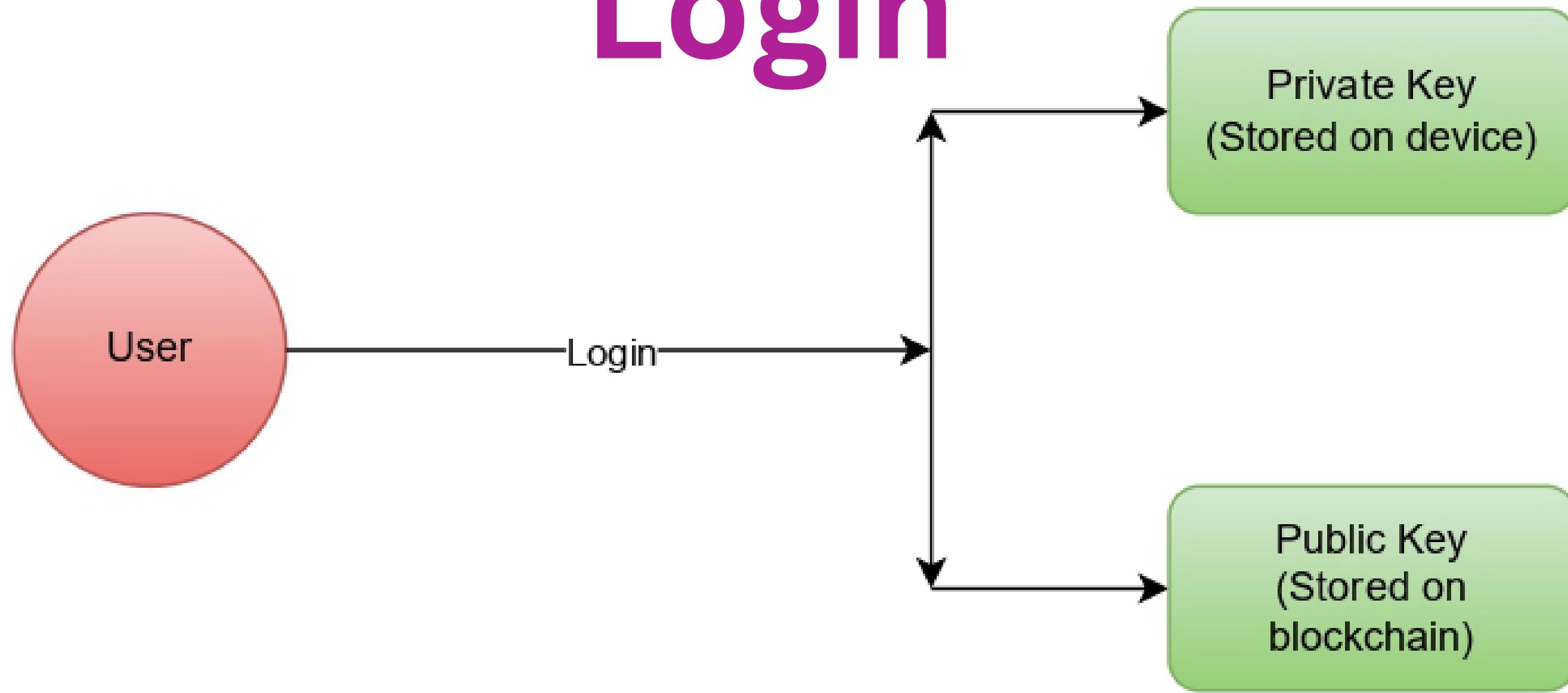
# UNDERLYING CONCEPT

## SIGNATURE BASED PDF

- **Signature-based PDFs utilize digital signatures to authenticate the document's origin, ensuring its integrity and verifying the identity of the signer.**
- **As the document's encrypted IPFS hashes are being uploaded on the blockchain, its issue history can also be tracked.**



# Login

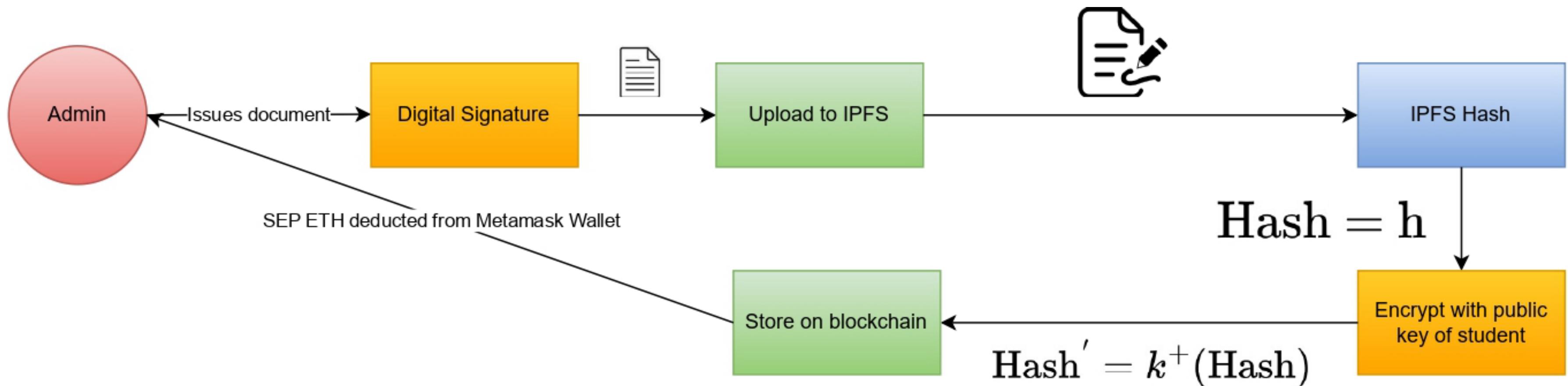


$\text{Private Key} = k^-$

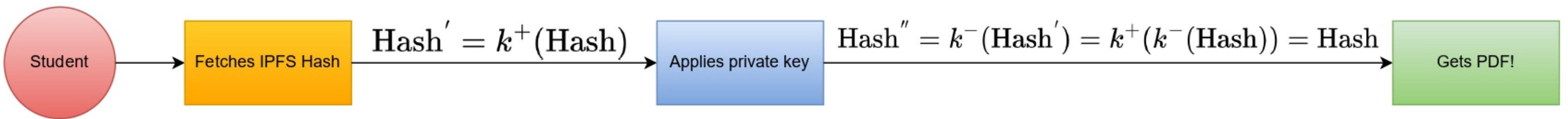
$\text{Public Key} = k^+$

# Issuing Document

Digital Signature =  $\text{Sign}(\text{Hash}(\text{Document}), \text{Private Key})$

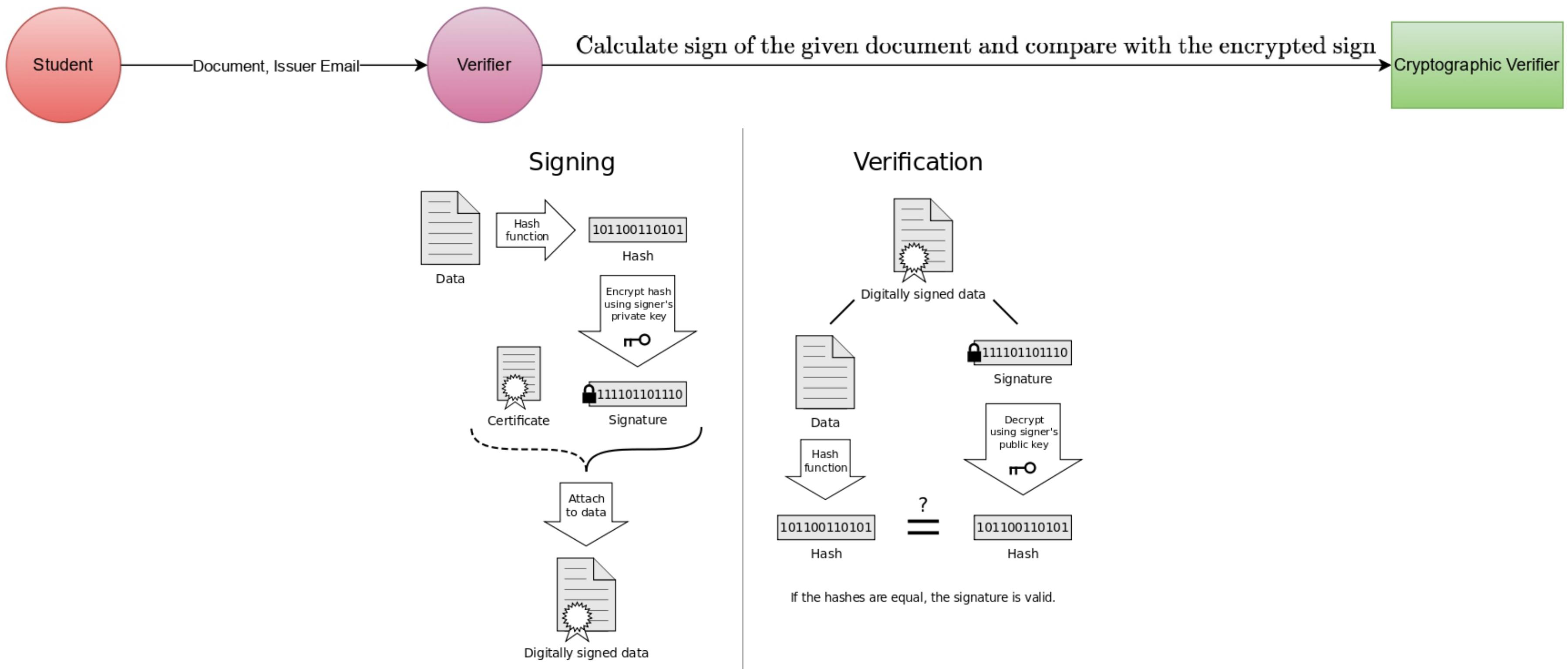


# Retrieving Document



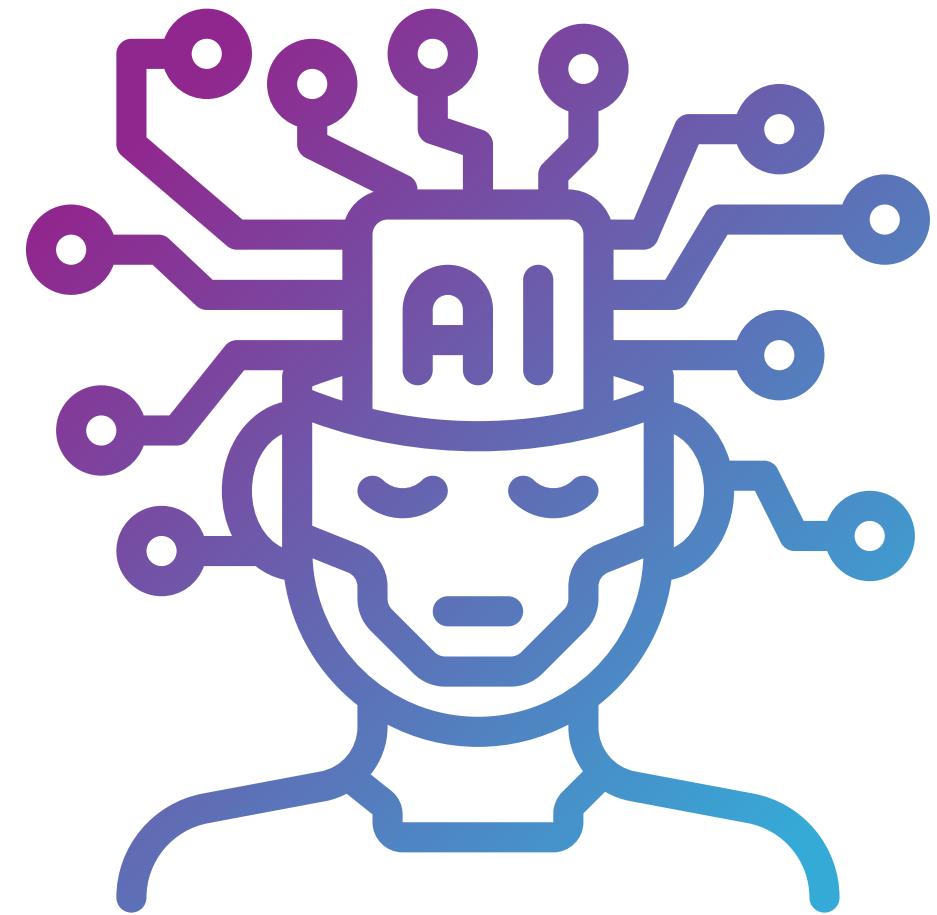
$$\text{Hash}'' = k^-(\text{Hash}') = k^+(k^-(\text{Hash})) = \text{Hash}$$

# Verifying Document



# USE OF GENERATIVE AI

Incorporating a tailored chatbot into our app has revolutionized user engagement. Trained specifically for our platform, it seamlessly addresses user queries and provides valuable insights.



7:07 5G LTE 5G 7:06 PM

SiangWeb3 Online

SiangWeb3  
Hello! Web3 enthusiasts!!  
07:06 PM

How to issue  
07:06 PM ✓

SiangWeb3  
Here are the steps ->  
1. Enter the email of the beneficiary of the certificate.  
  
2. upload the document that you want to issue by clicking on the upload certificate button.  
  
3. Click on the issue button to issue the document.  
  
If the document is issued successfully you will get a pop up message indicating the same.  
07:06 PM

How to verify  
07:06 PM ✓

SiangWeb3  
Following are the steps ->  
1. Enter the email of the issuer in the text field.  
2. Click on upload certificate.  
3. From your file select the document that you want to verify.  
4. Then click on verify  
5. If the document is correct then a pop up message will be displayed that document is verified  
07:07 PM

Type your message... 

Camera  Location



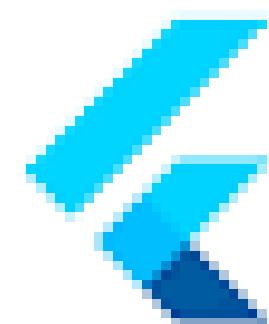
Features

# Available Across All Platforms

DDocs is built on **Flutter**, with its APIs hosted on **pythonanywhere.com** it is available on every kind of device such as Android app, iOS app, Web app, etc.



**python anywhere**  
by **ANACONDA**.



**Flutter**

# **Only Admin can issue documents**

## **Easy Usage: Upload PDFs and Download PDFs**

# Future Scalability

- An ecosystem can be created where institutions and established clubs can issue certificates/documents to individuals, and verifiers can verify the validity of the document on the said platform itself.
- Registering on the platform is easy, which requires only Metamask wallet and an email only.

# Demo Video

# Thank You!