SubsCrypt

Introduction

SubsCrypt is a BaaS(Blockchain as a service) for developers to facilitate the integration of their subscription methods on the PolkaDot blockchain using a smart contract. It helps both providers and customers by simplifying the subscription procedure using Blockchain.

For providers, a dashboard panel has been designed which shows them all their subscription plans and customers subscribing to each one, and let them manage each plan explicitly, add new plans and disable unwanted ones. As a result, useful business data of subscribed users is gathered for each provider, while protecting customers' privacy.

On the other hand, it provides customers with an easy to use environment to manage all their subscriptions in one place, and add new subscriptions. For this purpose, a dashboard panel is designed specifically for customers. Using this dashboard, customers can check their subscriptions, refund, or renew them. To facilitate the subscribing process, and eliminate the issue of trust to a third-party, a pop-up is provided which links providers' websites, directly to a trusted wallet.


Scenario of Use

Assume a scenario that Alice is a user of a service that provides subscriptions for milk delivery(called Milkryption). Milkryption has a monthly and yearly subscription method and they use SubsCrypt on their website (first they submit their plan on our contract on our website, then they can use our API), so if Alice ever has used our service so far, she will only need to connect her wallet and subscribe to the Milkryption using a trigger contract method(she will send some encrypted data that is encrypted with her key and also service provider key and then she will share that key with the service provider to have access to her data in the contract) but if that's her first time to ever use SubsCrypt, she has to also sign-up in the contract. Alice now can
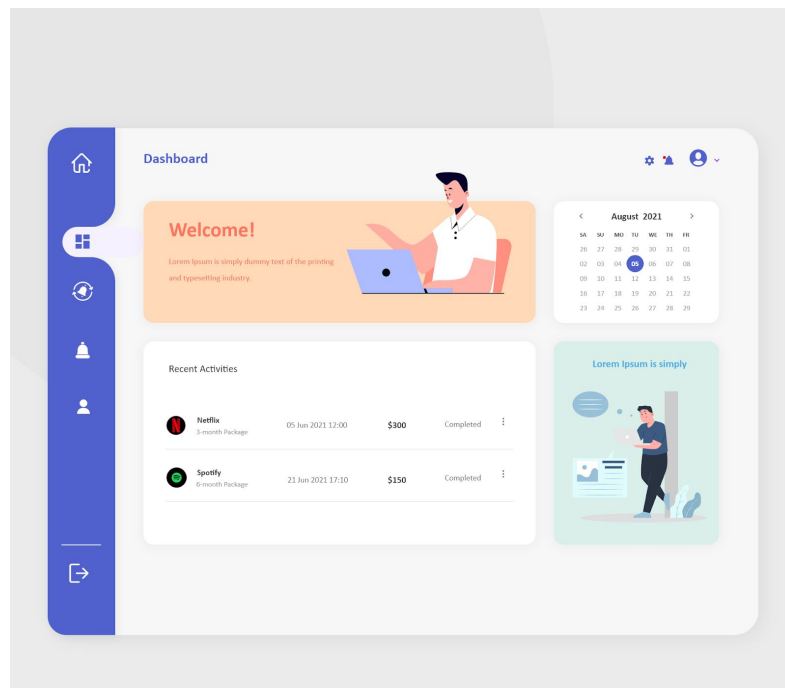
anytime request a refund of the remaining days of her service directly from the contract. Alice will hopefully use our service on several websites and now she can go to our website and manage her subscriptions(refunding or renewing) in one place.
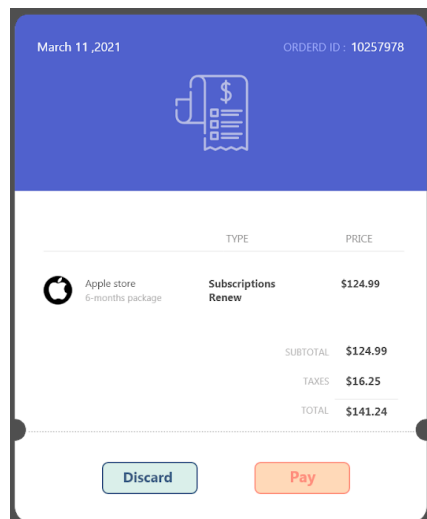
Trust

Payment Method

In the traditional methods of payment, you had to trust to a payment system like PayPal, Visa, or MasterCard. In more modern methods that are based on cryptocurrencies, you might need to trust a third-party service to facilitate the payment process. However, they usually don't offer direct payments, they verify the payments and then you can withdraw your money from your account on their website. Thus, whichever way you choose, there'll always be a matter of trust included.

Using SubsCrypt, your payments are direct, without the need of any third-party to do it for you or to verify your payments. Every subscription will have a transaction that holds the refund in the smart contract's wallet and sends the rest directly to your wallet; Whenever a user's subscription period is over, you can withdraw the held money from the contract's wallet. For verification, you yourself can check the data on the contract, or use our APIs to do it for you.

Refund

As a customer, you had to dig into providers' websites for information about their refund policies, then trust them on fulfilling their assurances. With the help of this project, you can easily check refund policies on the contract. The refund amount of the subscription plan will be held on the contract's wallet and will be returned to you if you wish. The providers won't have access to that money and as a result, will not be able to spend it until your subscription period is over. Because of the transparency of the smart contract (the code is open-source and the transactions are on the blockchain), you won't need to trust any third-party.

Privacy

The old fashioned methods might store your purchase history and your private data about your preferences. SubsCrypt allows you to be anonymous and won't store any additional data. When you are anonymous, your purchase history on different websites

won't be connected to your identity if you don't want to, and can't be used as a marketing technique.

Accessibility

Censorship

Discrimination is happening right now on several bases; people worldwide are facing national and international censorship by governments or big corporations that endanger their privacy and freedom of usage. By providing services on the blockchain, we can assure no discrimination(by any criteria) happens on using a service on our platform.

Sanction

Sanctions are common in many countries. Because of that, many people can't even use online services because of their nationality or their country of residence. With the help of blockchain technologies and the users being anonymous, your residency will not be revealed. So you can pay for your subscription no matter where you are. Your access to these methods can not be manipulated by any government.

Cost (High Fee)

By eliminating third parties from transactions, you won't need to pay any additional commission for your purchases. The only extra money you need to pay is the transaction fee on the blockchain which is neglectable.

User Experience

Developer Experience

In the old days, a developer had to implement payment methods and databases for storing purchases and subscription data while we offer an easy to use API for creating subscription plans, verifying payments, and checking customers' subscription status. You can also use our provider dashboard to check and manage your plans and your earning.

Customer Experience

Nowadays, in order to manage your subscriptions, you need to visit your account on each provider's website. For subscribing or renewing your old subscriptions, you need

to follow methods chosen by each provider that can vary to a wide extent, and in some cases require you to share unnecessary information. SubsCrypt provides customers with an all-in-one dashboard where they can manage all their subscriptions of different websites and providers in one platform. Using this dashboard you can easily check all your subscriptions, refund, and renew them. In the times of making a payment on a provider's website, you don't need to remember any card info and the procedure will be uniform and straightforward everywhere. The only thing you need is an online wallet on your device. To identify your subscription on providers' websites, (even on smart devices such as TVs) you only need a token and a passphrase, So you don't have to type long wallet addresses on devices that are hard to type on.

Future Plans

1. First Quarter 2021:

We are developing a platform using a Edgeware parachain called Beresheet. It will have the main functionality on a test net. We will develop APIs to use on websites, a pop-up for payments using EDG, and dashboards for both providers and customers to check and manage their subscription plans.

2. Second and Third Quarter 2021:

We want to create our own customized chain using the substrate. Using that we don't need a third-party chain to submit our smart contract. We will eagerly look for funds and accelerators to complete this part of the project.

3. Fourth Quarter 2021:

After developing our chain, we will connect it to PolkaDot as a parachain. By the test net capacities, we will test our chain before actually using it. We will start our ICO in this stage.

4. First Quarter 2022:

When tests are complete and we are sure about every aspect of our chain and smart contract, we will enable our main net so that this project can be used by real providers and customers.

For more technical information, visit: https://oxydev.github.io/SubsCrypt-docs/