

**A** - Name of project and Project URL on Ideascale/Fund

Proposal name: **cBilling - Cardano Billing DApp**

Fund 8

Challenge: **DApps and Integration**

<https://cardano.ideascale.com/c/idea/62678>

Funded project number 800106

budget: \$49,150

**B** - Name of project manager

Trong (telegram: @alex\_trongnguyen)

**C** - Date Project Started

22th of Aug 2022

**D** - Date Project Completed

Dec 2023 (updated)

**E** - List of challenge KPIs and how the project addressed them

The KPIs form the challenge brief most relevant to this proposal is:

- Integrations with existing products.
- Application output and transactions.
- Attract users to the platform.

**To address the key KPIs of the challenge fit this proposal.**

We built a billing system allowing users to sign up for an account to create and manage their transactions.

The system consists of an end-user account and a shop or partner account that needs to create and manage transactions on the Cardano blockchain. cBilling is a set of APIs that call and retrieve Cardano transactions that users are registered on our system.

When a shop account registers and queries transactions that are integrated with ADA payment on the cBilling, the system will create invoices to send to users who want to create and save that shop's transaction history for managers. In addition, cBilling provides APIs that allow them to integrate ADA payments on e-commerce platforms using cBilling accounts.

The purpose of the project, we will provide a convenient tool for online payment and invoice management of ADA crypto. We hope to have more options for users who want to make and manage their transactions on the Cardano blockchain.

**F** - List of project KPIs and how the project addressed them

- The number of APIs built.

- APIs number retrieved.
- The number of registered users.
- The number of invoices generated.

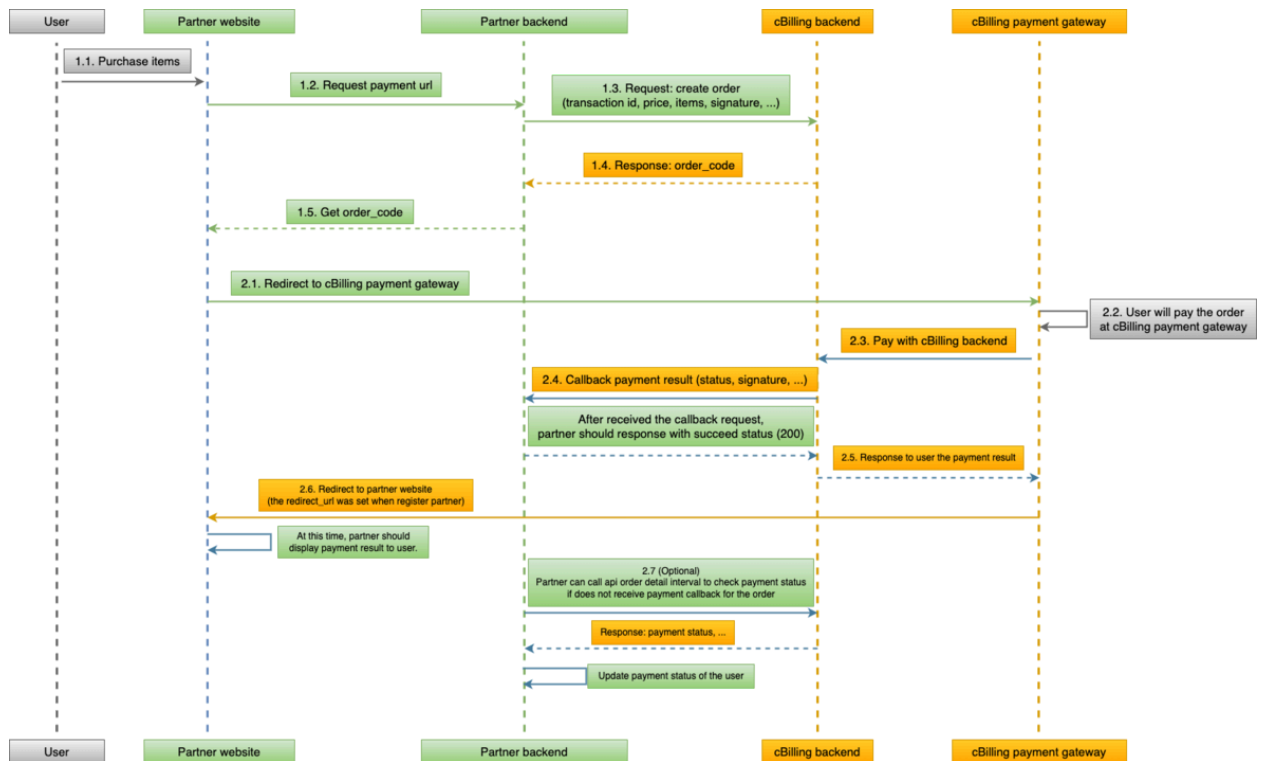
### To address the KPIs given in the project.

We have performed the following tasks:

Here is cBilling public domains:

- API (backend): <https://mainnet.cbilling.io/api>
- WEB (frontend): <https://cbilling.io>

### - Build APIs, Overview APIs working process



## - Coding APIs and implementation.

The screenshot shows a code editor with two files: `index.js` and `doc-1.md`. The `index.js` file contains the implementation of the Register partner and Implement cbilling payment APIs. The `doc-1.md` file contains the documentation for these APIs.

**Register partner**

- Go to page: <https://cbilling.io>
- Signup partner.
- After you sign up, you'll be able to see: Secret key & Project code.

**Implement cbilling payment**

- C# code example

```
#service
public async Task<ApiResponse>
CreateNewOrder(CreateOrderRequestBody requestBody) {
    // Try parse or get project_code: 00000000-0000-0000-0000-000000000000
    if (!Guid.TryParse(requestBody.project_id, out var
project_code)) {
        return new ApiBadRequestResponse("Invalid
project id");
    }

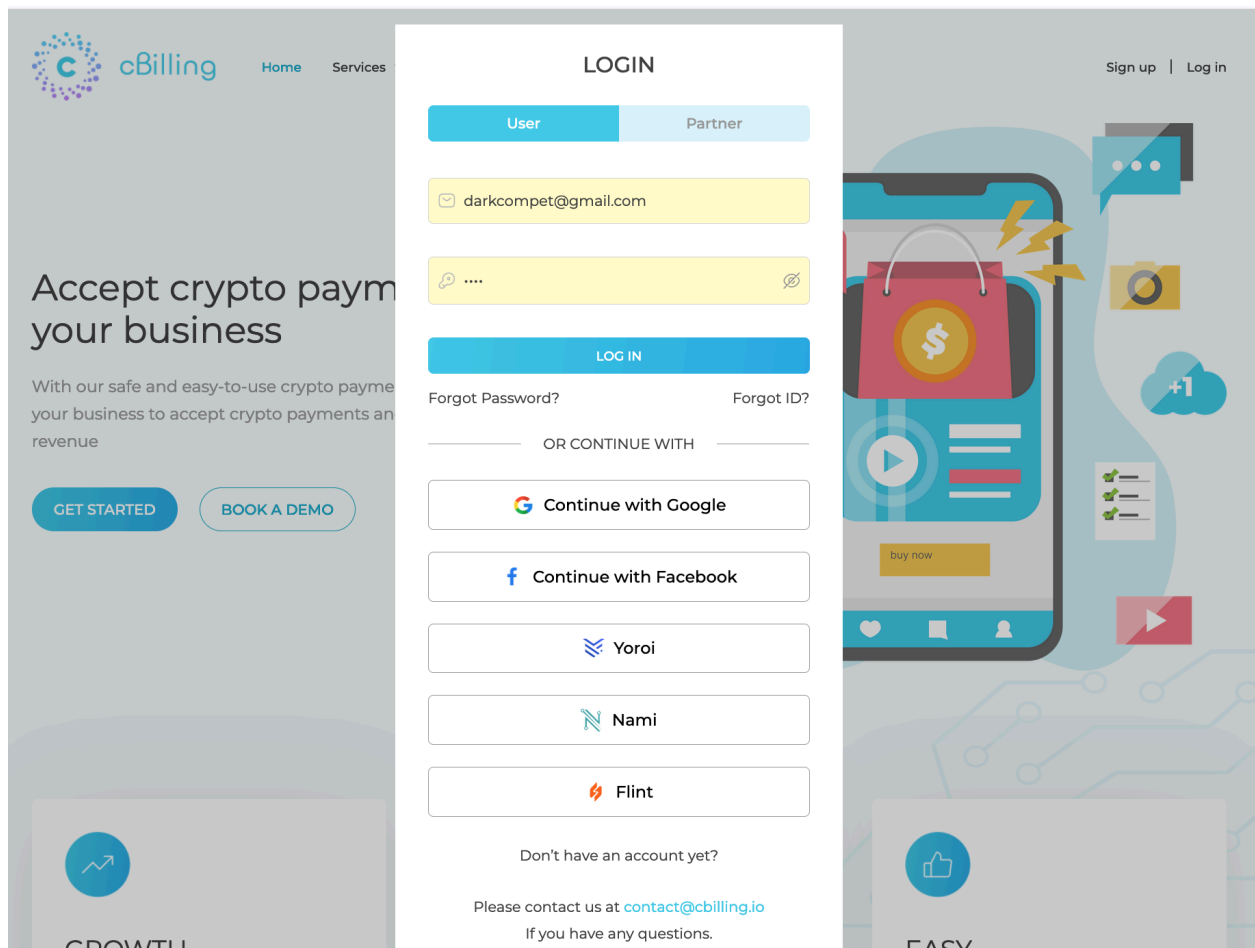
    using var transaction = await
this.dbContext.Database.BeginTransactionAsync();
```

<https://github.com/adaboys/cBilling/tree/main/api-partner-main>

## - Build web front end

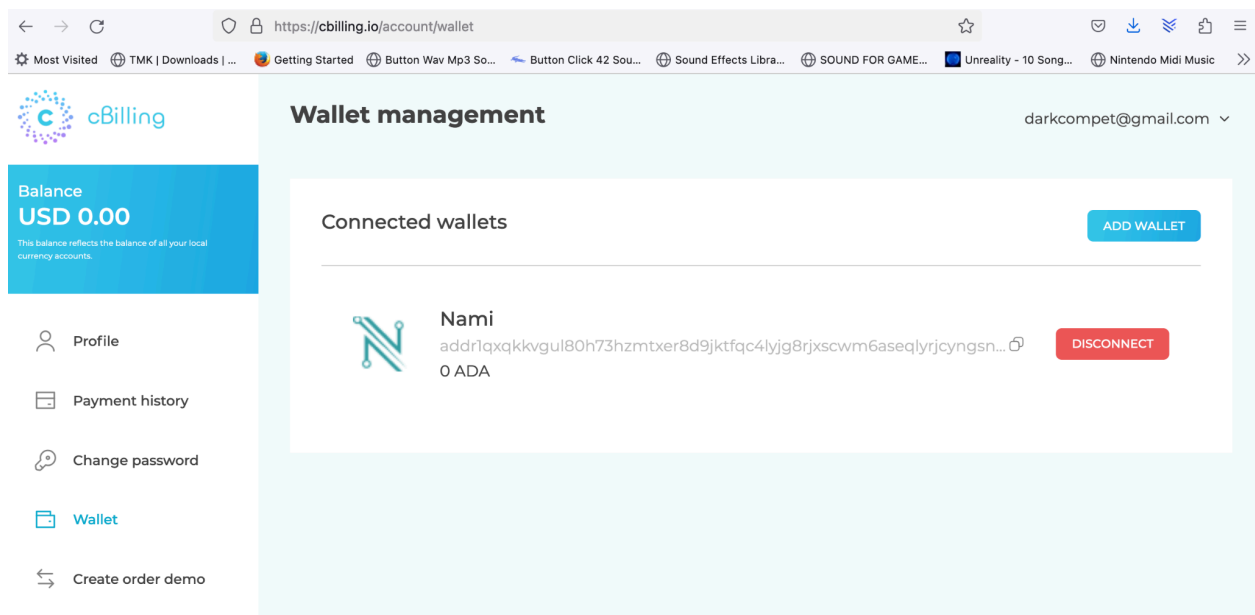
<https://cbilling.io/> Account Demo: User & Partner account [darkcompet@gmail.com](mailto:darkcompet@gmail.com)  
pass 1234

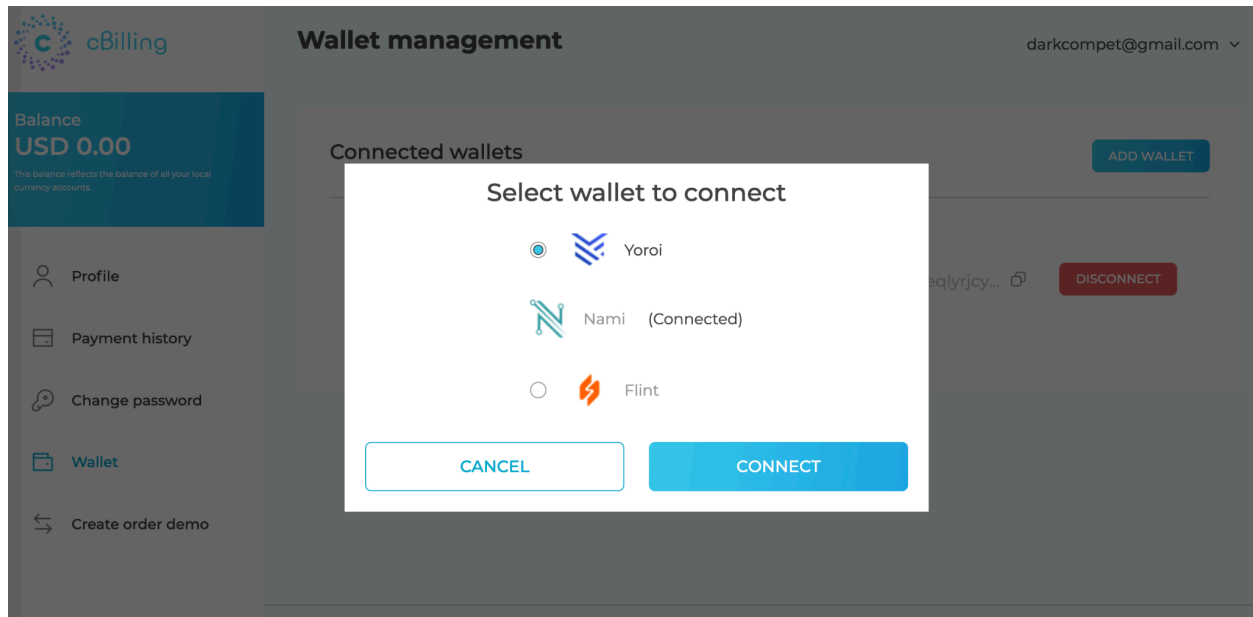
The screenshot shows the homepage of the cBilling website. The header includes the cBilling logo, navigation links (Home, Services, Company, Resources, Contact), and a Sign up / Log in link. The main content area features a large illustration of a smartphone with a shopping bag icon, surrounded by various icons representing different services and features. The text "Accept crypto payments, grow your business" is prominently displayed, followed by a description of the service and two buttons: "GET STARTED" and "BOOK A DEMO".



- **Build internal cBilling wallet in the system and connect ADA wallet**

**<https://cbilling.io/account/wallet>**





## We have 2 type accounts (User and Partner)

- \* One account for Partner (online shop) needs to register and create API payment for that shop:
- \* One User account for payments and purchases accepted from the registered shop:

- **Build register function (Partner-shop Account)**

**<https://cbilling.io/account-shop/projects/create>**

Project Name \*

MyFlowerShop

Logo URL \*

https://www.test.com

Wallet Address \*

addr\_test1cardanoblockchainwallet

Payment Callback Url

https://test.com/api/cbilling/payment/callback

Payment Redirect Url

https://test.com/api/cbilling/payment/redirect



 Profile

 Projects

 Transactions

## Update Project

Project Name \*

IronSky NFT Games

Logo URL \*

https://marketplace.ironsky.games/images/logo.png

Wallet Address \*

addr1qxkfw50va0avtchg6gh6ggeh6ql5a7cscm7zlmxsp4spm3we2x97hlf

Payment Callback Url

https://api.ironsky.games/api/nft/cbilling/callbackPayment

Payment Redirect Url

https://marketplace.ironsky.games/payment-status

UPDATE

<https://cbilling.io/account-shop/projects>

**Project Management** darkcompet@gmail.com

Profile  
Projects  
Transactions

CREATE

ID	Project Name	Secret key	Project Code	Request count	Action
1	IronSky NFT Games	8e1842f512e6465e810327fa235b51889LN...	281a0e90619747a3a988dc8e0959d8b6	0	
2	Commander NFT Games	96b5961419ab48e498ad857e0a3f8e874d...	a684425ec0ae4084919581045a67715e	0	

< 1 >

- On the User account create an order payment registration through the shop that has been set up in the partner shop account.

<https://cbilling.io/account/create-order-demo>

**Create order demo** darkcompet@gmail.com

*Registered and provided by Partner(shop) Account.*

Project \*

Transaction \*

Price In Ada \*

Description

Items

Item	1	5	X
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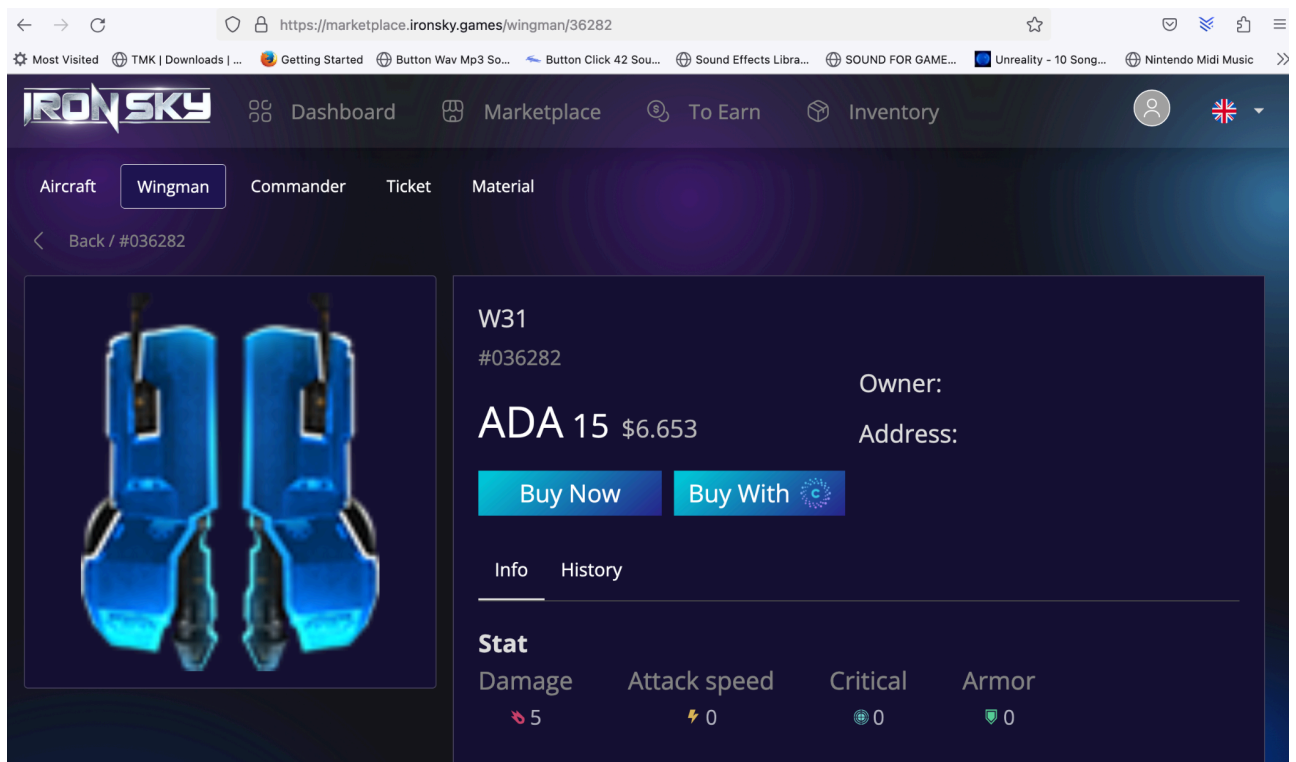
ADD

CREATE

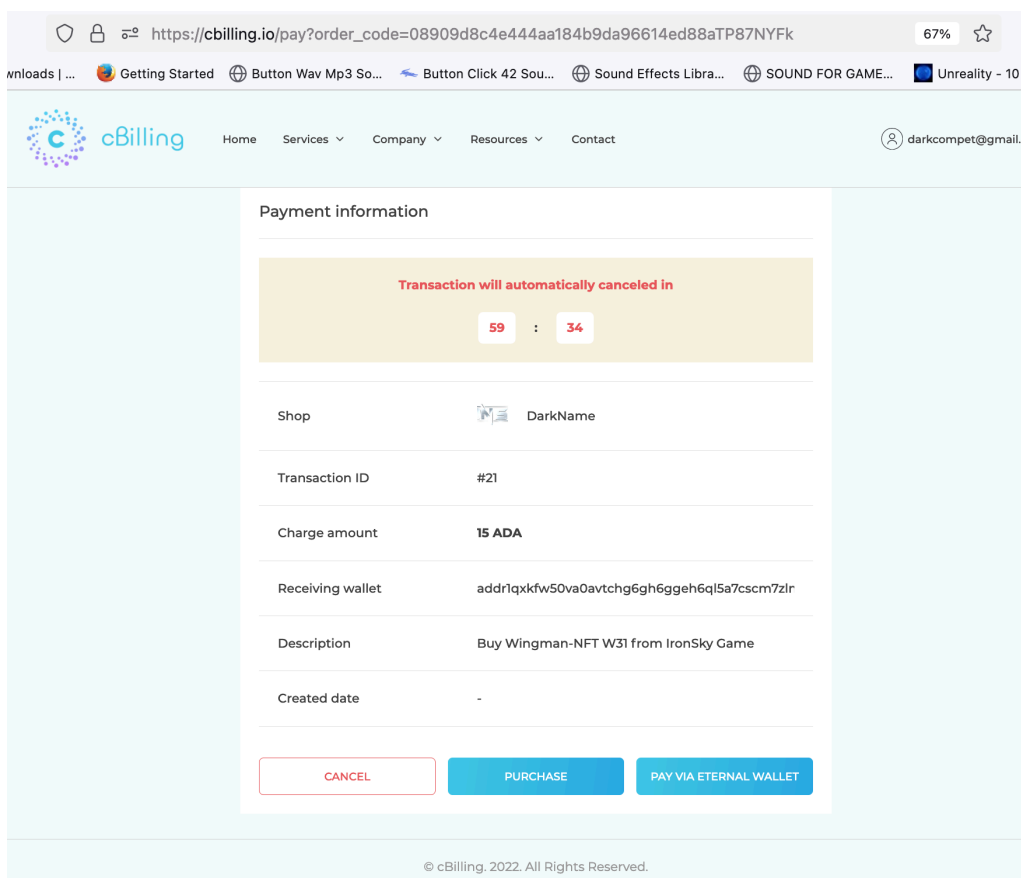
- Build button cBilling payment

(in case build shop of ironsky game)

<https://marketplace.ironsky.games/wingman/36282>

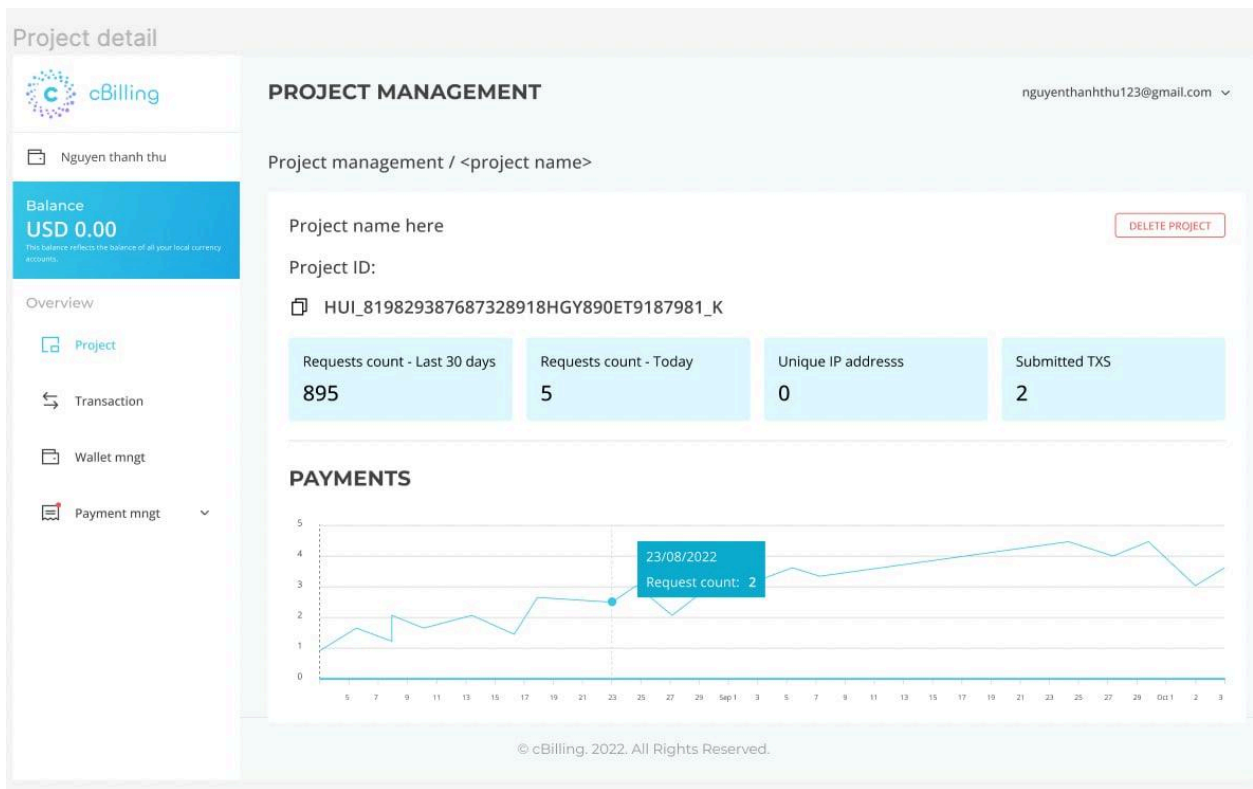


*(The example of building a billing payment button, we integrated in an IronSky game NFT trading site is here, call API and button build.)*



- Build transaction history and invoices





**Payment History** darkcompet@gmail.com

User address	Shop address	Shop name	Order code	Date/time	Payment status	Price	Action
addr1vxw9zhxfpuerjj88np...	addr1qxkfw50va0avtchg6...	DarkName	4b5a74f4b0a943f895e70d932bb96ab3maA...	15/05/2023 11:13:20	Processing	15	Export Invoice

< 1 >

- Export invoices

**Shop name**[DarkShop](#)**User address**[addr1vxw9zhxffpuerjj88npqr2zwrnc  
vpj4d76pen0vws4wva5g5yl5gh](#)**Order code**[4b5a74f4b0a943f895e70d932bb96  
ab3maAwpLkk](#)**Shop address**[addr1qxkfw50va0avtchg6gh6ggeh6  
ql5a7cscm7zlmxsp4spm3we2x97hlf  
zq0v29kqj30hu3kz2qkhkj78hmq9fu  
92gq3mss3qtkl](#)**Invoice****#4b5a74f4b0a943f895e70d  
932bb96ab3maAwpLkk****2023-05-****03****07:18:35****P****ai****d**

Descript ion	Site	Billing Perio d	Quantity	ADA
Wingman -NFT (W31#36 313)	<a href="https://marketplace.ironsky.ga/mes/payment-status">https://marketpl ace.ironsky.ga mes/payment- status</a>	2023- 05-03 07:18: 35	1	15

**Transaction hash:**[ccba6b90c45e8176320325910992480e1af32999522d5ca1887687241b461  
c88](#)**Payment Method: ADA  
via CBilling**

Coupon discount

0

Subtotal

15

**Total****15****\*/ Clarifies that the IOS app has not been developed yet.**

In fact, we did not carefully calculate this part. There are a number of reasons as follows:

- Developing for cBilling app payment requires more time and budget, as well as the terms of developing payment tools on mobile depend on the censorship policy of the Apple App store, making deployment difficult.
- The long project development time caused us to run out of funds and resources for the project, while we had to run 4 servers on AWS for 12 months to develop modules for the project. increases the project's budget costs.

Includes 4 servers: 2 servers running db-sync cardano node, 1 web-frontend server, 1 server for DB and S3 storage.

- The next solution is ours next:

- Research application deployment technology on iOS first on the TestFlight - Apple Developer testing section before deploying to the community through the Apple App Store.
- In parallel, use personal and team resources as well as raise funds to develop the cbilling version of the iOS app.

**\*/ Explanation of budget:**

We have a development team and co-proposers

Fees for members and completed project tasks are detailed in the link below.

<https://docs.google.com/spreadsheets/d/12v-zd0TJmstZ9ZmVu2zz4MqpxBqFZlw0dYle47YU-UY/edit?usp=sharing>

**G - Key achievements (in particular around collaboration and engagement)**

We have built a team of talented software engineers who are passionate about Cardano blockchain technology to participate in the development of this project. We have formed the ADABOys team consisting of system and software engineers engaged in research into Cardano's blockchain technology.

**H. Key learnings**

This is a project that we cherished for a long time when blockchain technology was born. We have been waiting a long time to choose the first Cardano blockchain platform for our project development. Cardano has great features in terms of security, decentralization, and low cost. It is suitable for implementation of this project.

**I. Next steps for the product or service developed**


With the current limited budget, we cannot expand the project at this time. However, we will continue to pursue the development of the project with great features such as PoS (Retail store), Remittance, and Crypto Trading and also expand to other tokens in the Cardano ecosystem that can be traded in the future. In particular, we want to call on investors to jointly develop this project, turning cBilling into a diversified payment platform with many features for users in the Cardano community to choose from.

**J. Final thoughts/comments**

We want to develop this project and improve it to the next level so we want to work, collaborate with partners, investment funds, and individuals who can contribute to advance this big project in the future. Cardano's dApp ecosystem.

**K. Links to other relevant project sources or documents.**

**Link documents:**

- Report:  **800106\_Close Out Report - cBilling Cardano Billing DApp [Updated]**
- (Docs) <https://cbilling.io/documentation>
- GitHub: <https://github.com/adaboys/cBilling>
- API (backend): <https://mainnet.cbilling.io/api>
- WEB (frontend): <https://cbilling.io>
- Account Demo: User & Partner account [darkcompet@gmail.com](mailto:darkcompet@gmail.com) pass 1234

**Link video here:**

<https://youtu.be/r4FUN6pqUEg>

[https://drive.google.com/file/d/1ZXbUKZRKyK9xDjKKZt8LKeqcY1pmoA\\_R/view?usp=sharing](https://drive.google.com/file/d/1ZXbUKZRKyK9xDjKKZt8LKeqcY1pmoA_R/view?usp=sharing)

**Link Community:**

Telegram support: [https://t.me/cbiling\\_dev](https://t.me/cbiling_dev)

Media: <https://builtoncardano.com/c-billing>

***Thank you so much!***