



Biomimicry inspired and secured new currency



THE UNIVERSITY
of EDINBURGH

ESALA:ECA

Introduction to Digital Design ARCH11249

Assessment 2 : Project Report

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2146: Global Context

Introduction

This background analysis is used to work on the Introduction to Digital Design and Digital for Interactive Media projects. As these projects have their own evaluation, the following introduction is **not part of the number of words** on any of them.

As these stories take part in the 22nd century, the present is used to talk about that time. The past itself is used to talk about every event that occurs before climate disasters that change the face of the earth.

The following pages present the **global context used for the two projects**, part of the research and a comparative table of the two worlds.

Global Context

In 2146, the world is divided into several regions, but there are essentially two types of regions, the **underwater** regions and those on the **surface**.

The whole world is governed by the **Confederation of Intercontinental Ocean Nations [C.O.I.N.]**. Their influence is total on the underwater regions. For most surface areas, it's another story. Indeed, C.O.I.N. tries to **control** everything and more particularly **History** itself. Asserting that humanity would make the same mistakes if it had access to its own history, it banned and censored most of the past, leaving the underwater people in **partial ignorance**. In another way, C.O.I.N. allows and encourages even **science to go further than ever**, which has allowed the emergence of new technologies. They also adopted the **metric system**.

On the surface, almost everything is different, some people - **rebels** like C.O.I.N. like to call them - do not want to forget the past. They pass on history and knowledge of the past from **generation to generation**. They received their nickname by carrying out actions, as well under water as of the surface, on the importance of knowing their origins. These actions were considered **terrorism** by C.O.I.N.

Two worlds

Underwater	Surface
wealthy	poor
law state	free state
technological / scientific	simple / archaic
ecological	still use objects from the past
References	References
1984	The Book of Eli
Gungan city / Star Wars: Episode 1	Mad Max
The passenger	Fallout

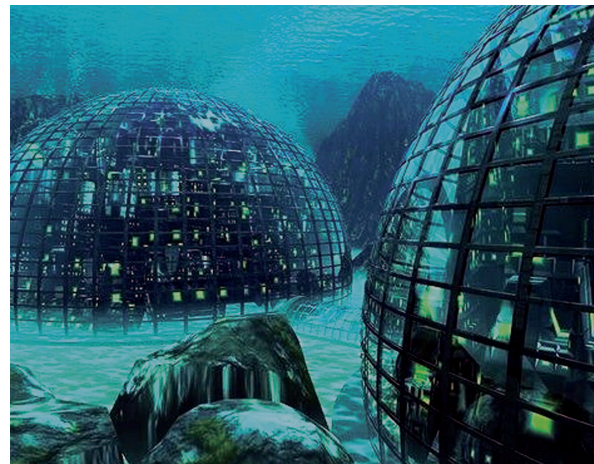


Figure a: Comparative table of the two worlds

Pinterest boards

<https://pin.it/g56rr3uskonyyd>

Projects Context

These two “civilisations” are **not at war**, but the **tensions are strong**.

In this year **2146**, two events may help the rebels to claim and make their convictions heard.

A new world currency

These new coins, banknotes and cards were secretly designed by members of the rebellion. They have managed to integrate some history by taking **biomimicry** as a general theme and we can be sure that they have tried to hide some messages in their creations or they will soon reveal **the secrets of this currency**. If so, there is no doubt that “**The Surface**”, the rebels’ newspaper will talk about it soon.

Fringe Artefacts exhibition

It takes place at the Meadowlark Tritium Museum on the Eastern Seaboard at **New Boston**.

By searching the ocean floor on the **old West Coast** for valuable resources, the aquatic recovery team retrieves ancient artefacts and a damaged digital database called “**I.ETFLI /**”.

Surprisingly, C.O.I.N. did not confiscate this data, which allows museum staff to build this exhibit. The rebels will certainly talk about it in their newspaper, “**The Surface**”.

This exhibition will be fully explained in the D4IM project report.

A NEW MONEY

Context

Even in its technological environment, the Bank of the Confederation of Oceanic Intercontinental Nations, which issues new money, **cannot be that digital**. Indeed, this new currency should also be **usable on the surface**, where the technology is not widespread everywhere.

Concept

In this “analogue / digital” context, it was decided to take **biomimicry** as a global subject of these new coins, bank notes and cards.

Biomimicry represents the link between **what was** - nature and its ingenuity - and **what will be** - the technologies that result from it and created by man.

This theme was also chosen to **encourage surface inhabitants to use this new currency**.

Biomimicry (inspiration and resulting technology)

Coins

Gecko	Climbing materials
Bur fruit	Velcro

Bank Notes

Firefly	Self-produced light
Phytoplankton	Artificial photosynthesis

Bank card

Stenocara Beetle	Water harvesting
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ID/C-Mist Card

Kingfisher	Aerodynamic profiling
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Dimensions

The old credit card dimensions serve as the basis for all the money. They are based on the **golden ratio**, 1,618. As shown in Figure 1, the other elements of the series move towards the **ratio 2/1**.

The dimensions of the 5 creds coin result from the difference between the credit card and the 500 creds bank note.

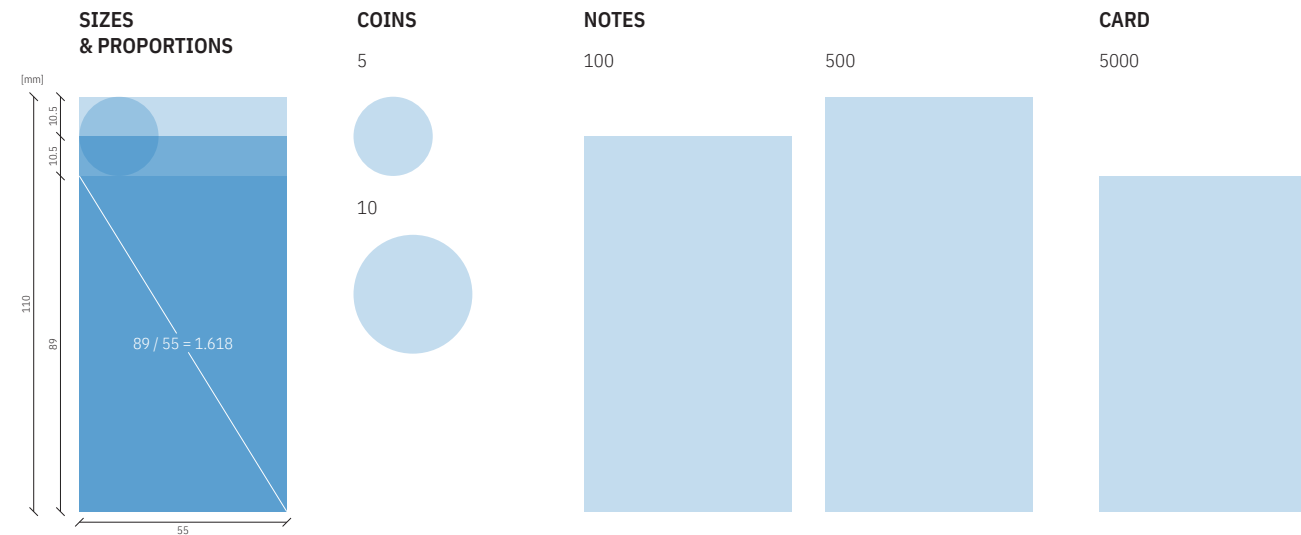


Figure 1: Dimensions of the elements of the currency

Design

For the **money**, the **2D low poly style** was chosen. This style is often used in C.O.I.N. communication, especially for the artefacts exhibition. Some **small graphic details** have been added to increase the **difficulty in forging** the bank notes.

For the propaganda **poster**, a **flat design** is used to stay simple and contrast with the rest, but also to stay in a style quite close to the series.



Figure 2: Firefly in low poly style

Dollar logo

The dollar logo, which is also used by the bank is a **double “D” crossed out**.

This “capsule” logo is frequently **declined** especially for the ID/C-MIST device.



Figure 3: dollar and bank logo

Fonts

Three fonts have been used for the currency and the report: **Aldrich Regular**, **IBM Plex Sans Condensed** and **NOVASTAMP**.

Aldrich Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

IBM Plex Sans Condensed

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

NOVASTAMP

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Figure 4: fonts presentation

Coins

To be **strong** enough, the **outside** of the pieces is **polished metal**.

The **centre** is in **polarised glass**. The translucent vision offers an interesting vision mixing value on one side and the dollar sign on the other.

Each piece has its own colour, **green** for 5 creds and **blue** for 10 creds.

Crossed by a medium-intensity light, the pieces reveal a **holographic image** of the inspiration of nature or technology.

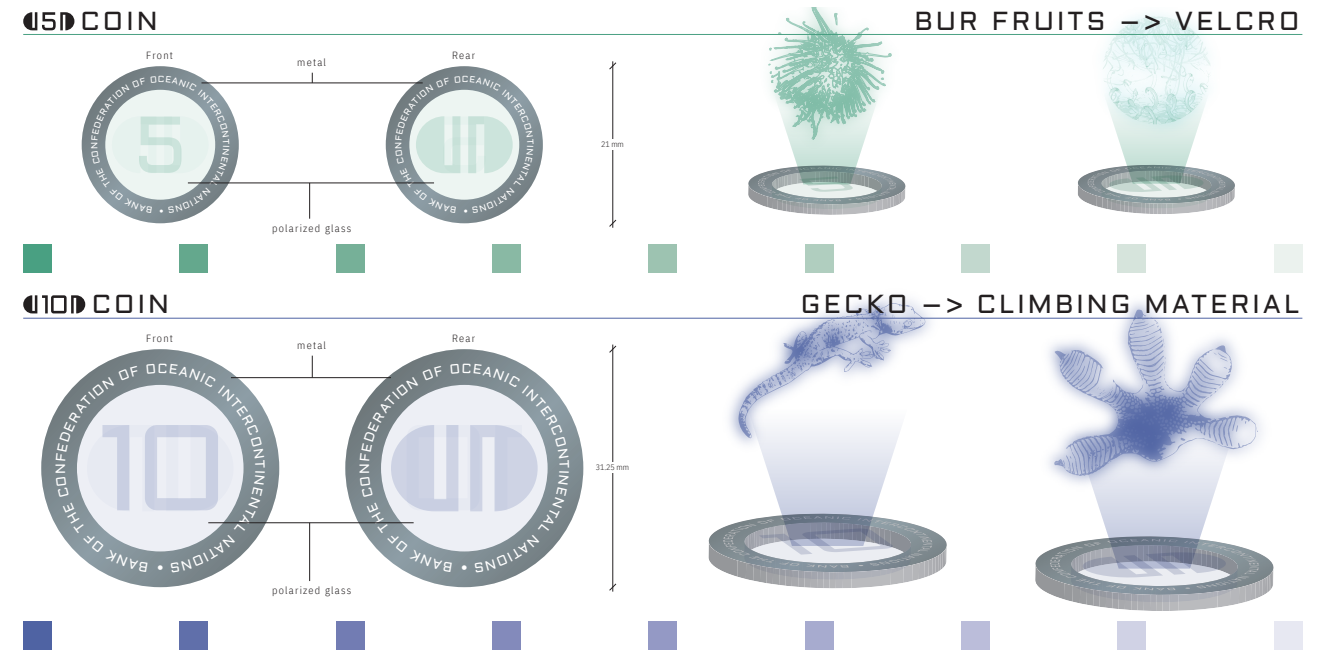


Figure 5: 5 creds and 10 creds coins, front, back and holographic images

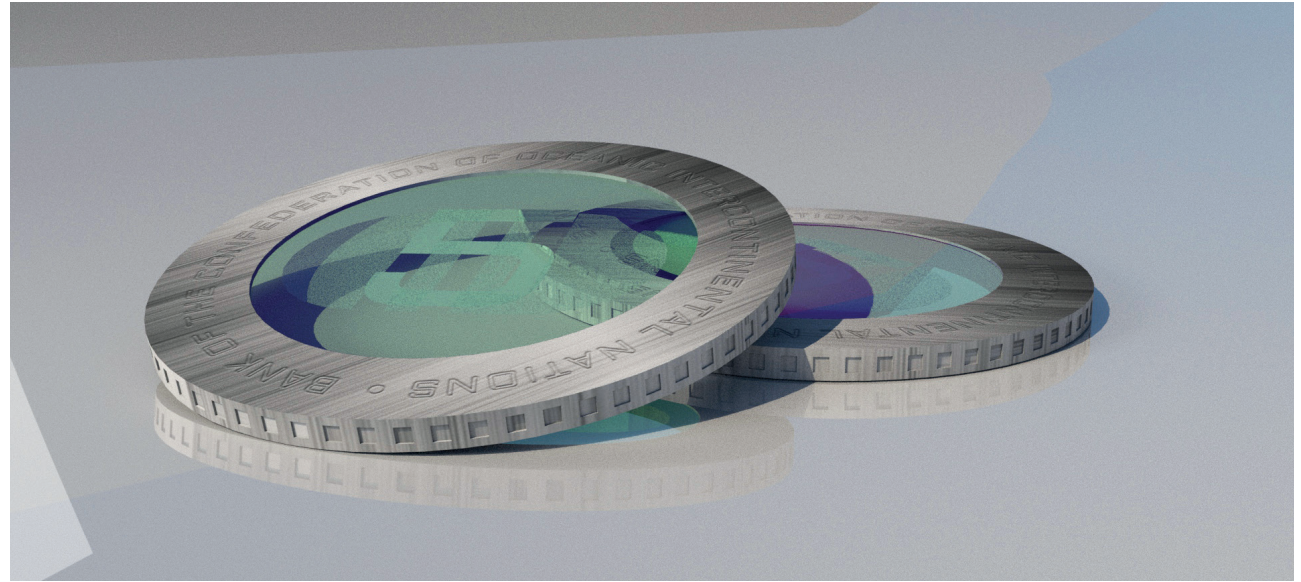


Figure 6: 5 creds coins mockup

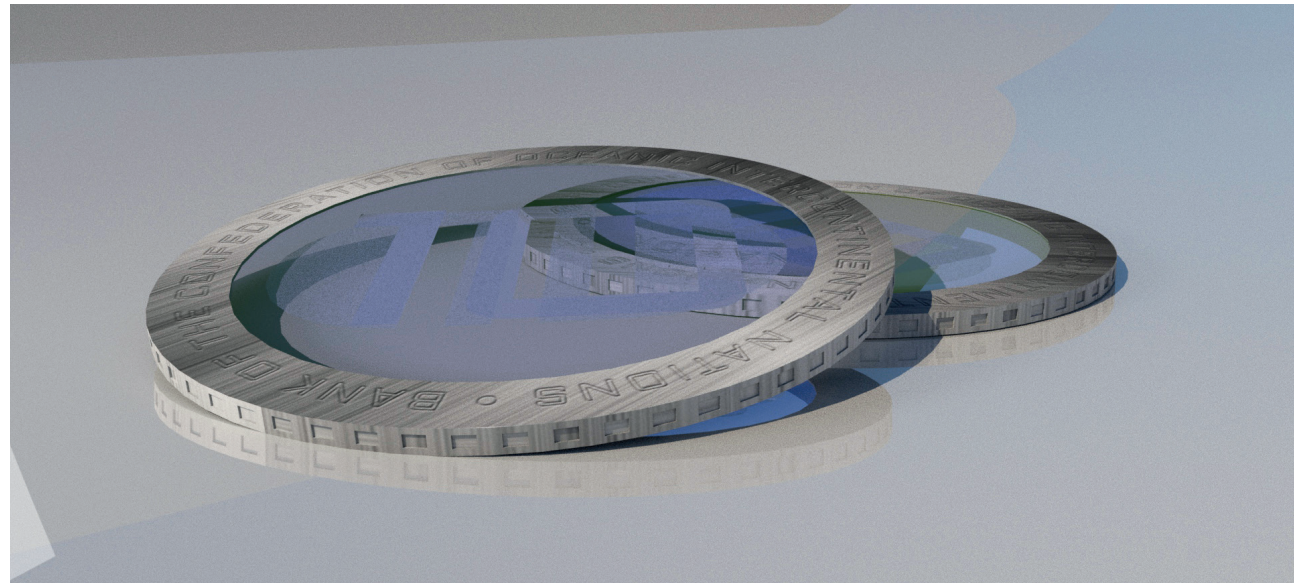


Figure 7: 10 creds coins mockup

Bank Notes

The design presents bank notes on **both orientations** depending on the side to increase its **accessibility**.

They are printed on **synthetic paper** created from seaweed. This material is known to withstand **high temperatures**, and drought as well as wet environments.

The safety against falsification is ensured by the **magnetic lines** on the top and the logo of the bank which is **holographic**.

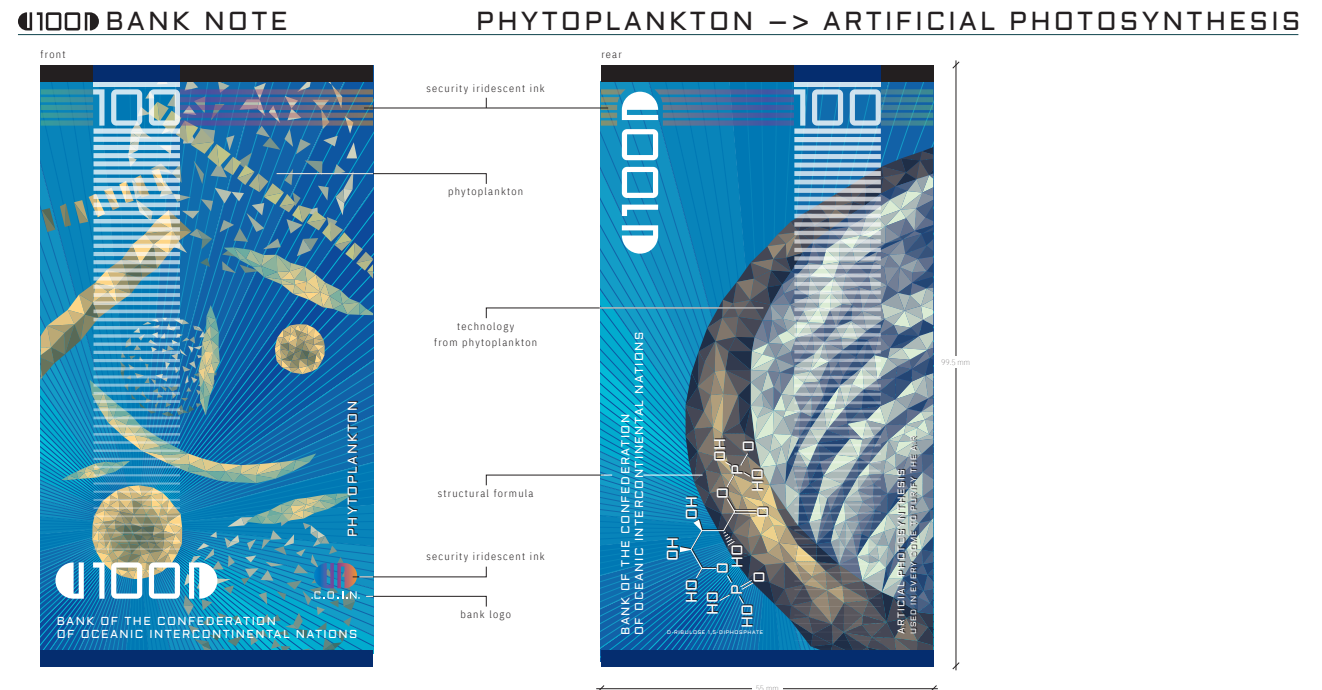


Figure 8: 100 creds bank note, front and back



Figure 9: 100 creds bank notes mockup



Figure 10: 500 creds bank notes mockup

5000 BANK NOTE

FIREFLY -> SELF PRODUCED LIGHT

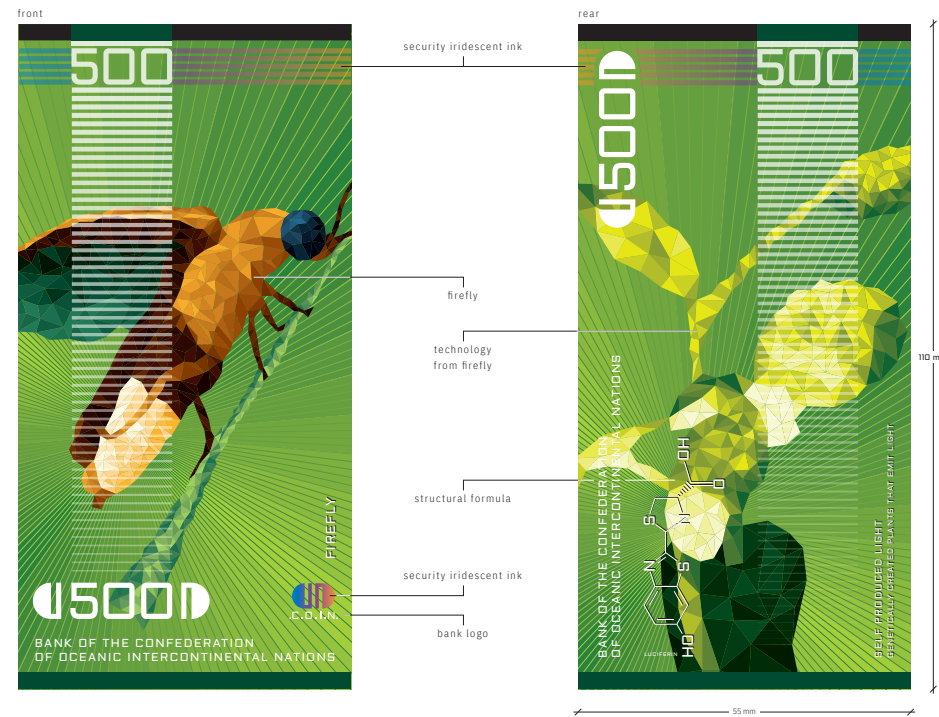


Figure 11: 500 creds bank note, front and back

Bankcard

The **bankcard** for itself is **metal** and the size of the credit cards of the old world.

Its security is ensured by the golden logo of the bank which is in fact a **chipset**.

15k BANK CARD

STENOCCARA BEETLE -> WATER HARVESTING



Figure 12: 5k creds bank card front and back



Figure 13: 5k creds bank card mockup

ID/CMist Pendant

This **pendant**, in the **shape** of the logo of the **Bank of C.O.I.N.**, is in fact a real small **technological device**.

It's built of **metal**, and its 2 surface are **display screen**. This will allow C.O.I.N. to **change its design** as often as they want.

Once **opened**, the pendant **reveals 2 zones** which display the personal **identification number** of the owner, its **travel class** level and a connectivity zone which once visible give access to **wireless connection**.

ID/C-MIST PENDANT – FRONT

KINGFISHER → AERODYNAMIC PROFILING

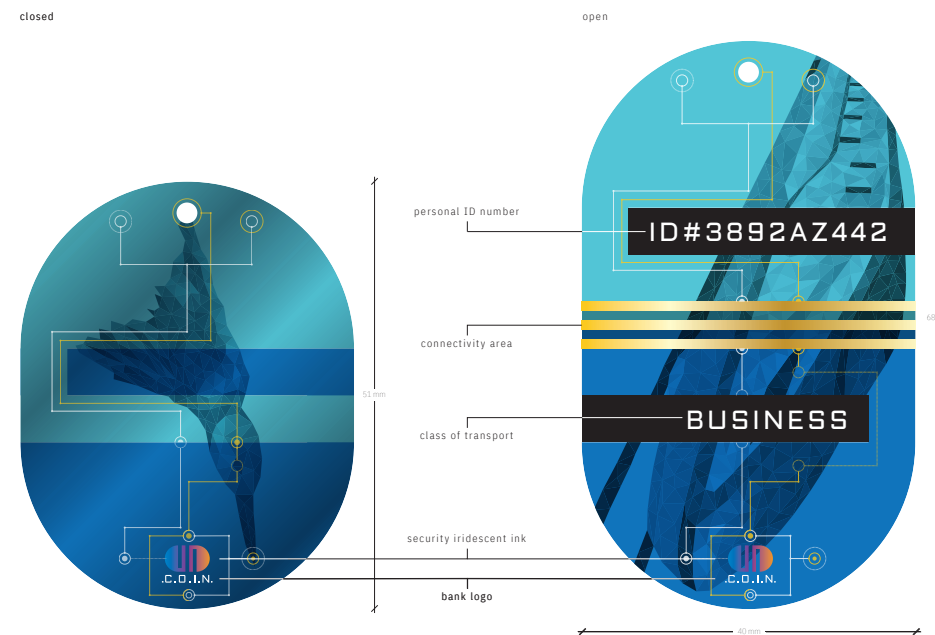


Figure 14: ID / CMist pendant front, closed and opened

ID/C-MIST PENDANT – REAR

KINGFISHER -> AERODYNAMIC PROFILING

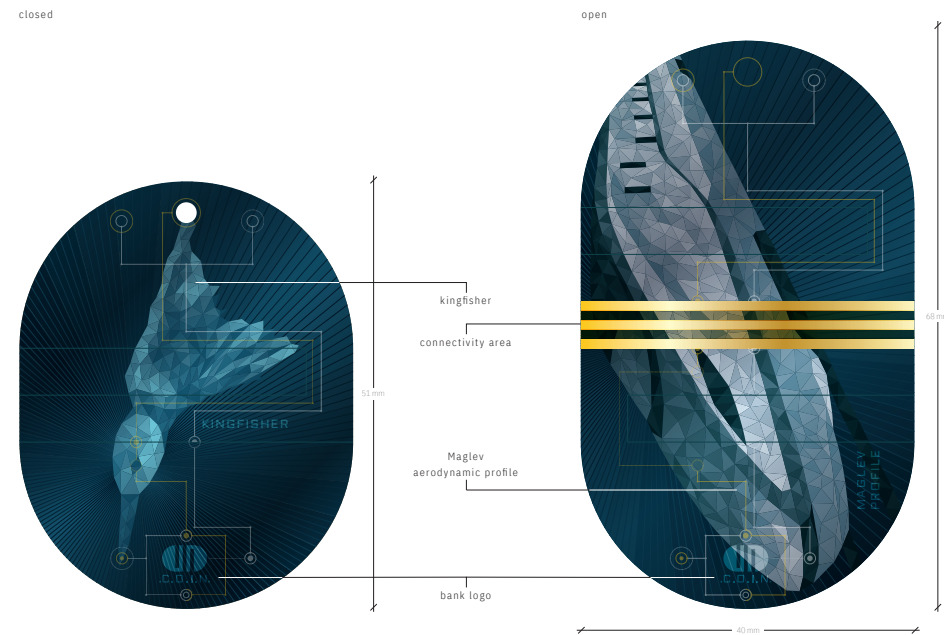


Figure 15: ID / CMist pendant rear, closed and opened

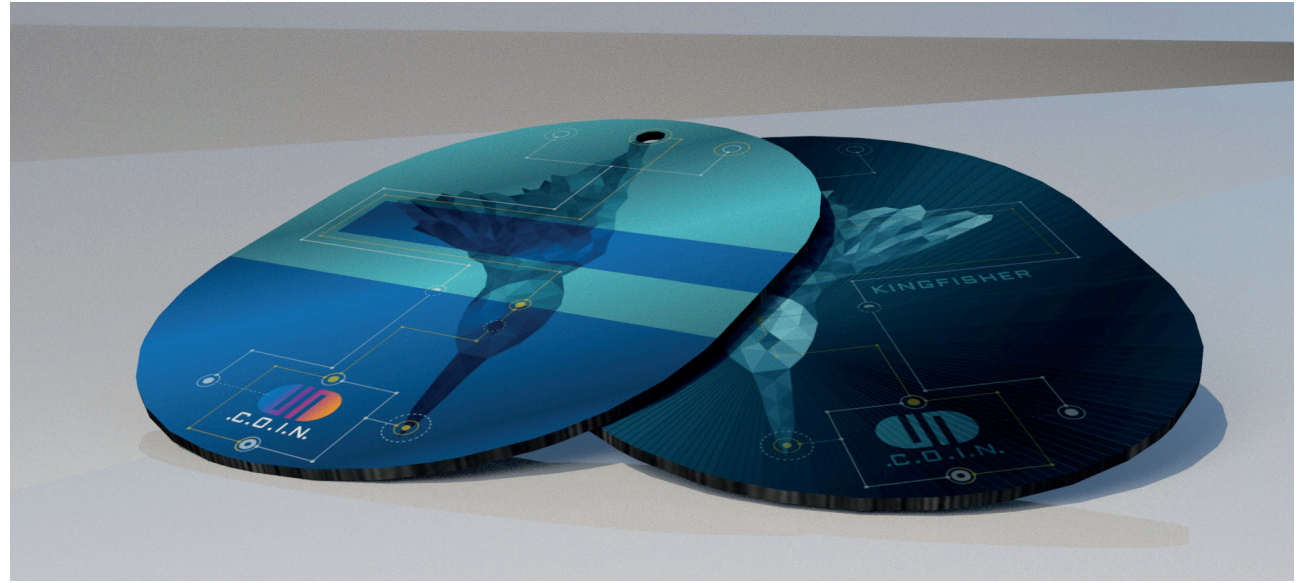


Figure 16: ID / CMist closed pendant mockup



Figure 17: ID / CMist opened pendant mockup

Propaganda Poster

At the same time, the Bank of C.O.I.N. wants to continue **exploring the west coast** of what used to be the United States. Indeed, they know that there are many **resources** buried underwater.

While searching the ocean floor near the San Andrea Fault, they have recently discovered many strange **artefacts**. The **exhibition** resulting from this discovery is a **huge success** and they are trying to ride this wave to get money and resources to continue research in the west.

The poster represents one of the most iconic structures on the west coast of the past, **the Golden Gate Bridge** underwater, or what is left of it.

The **animation of the light rays** captures the gaze and the rays become brighter when they arrive on the interactive place of donation.

When someone places their ID / CMist device in front of the interactive zone, they can choose to see information about the project, donate money, or register with the search teams.

PROPAGANDA POSTER



Figure 18: Propaganda poster, animations and interactions

Website – “The Surface”

The Surface is the rebel newspaper. That is why its **graphic design** is the **antithesis** of the currency or even the poster.

Since it is primarily a **print** edition, the Web design **tries to look like it** as much as possible. Even **images** are processed to **look like printed on paper**, but they are also visible in their **original state** by **hovering** over the cursor or **tapping** them on a mobile device.

The website is fully **responsive** and can be fully viewed on **mobile** or **desktop** devices.

The URL of the website is: <https://playground.eca.ed.ac.uk/~s1828107/theSurface>



Figure 19: The Surface website on mobile browser, with a tapped image on the right

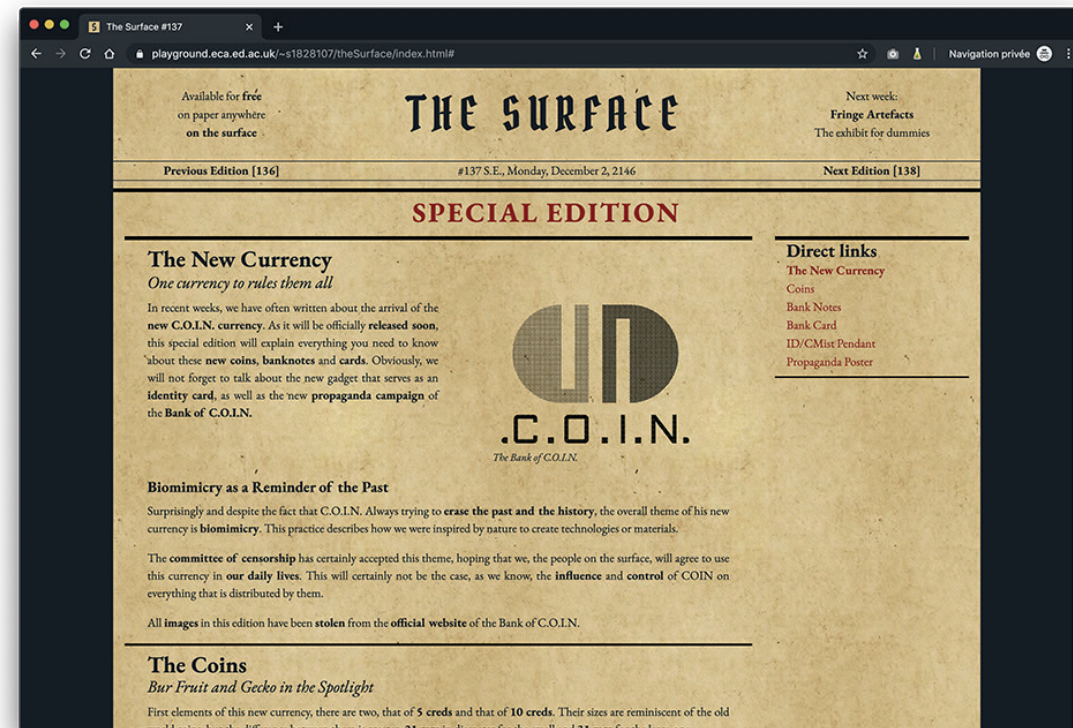


Figure 20: The Surface website, top of the page on desktop browser

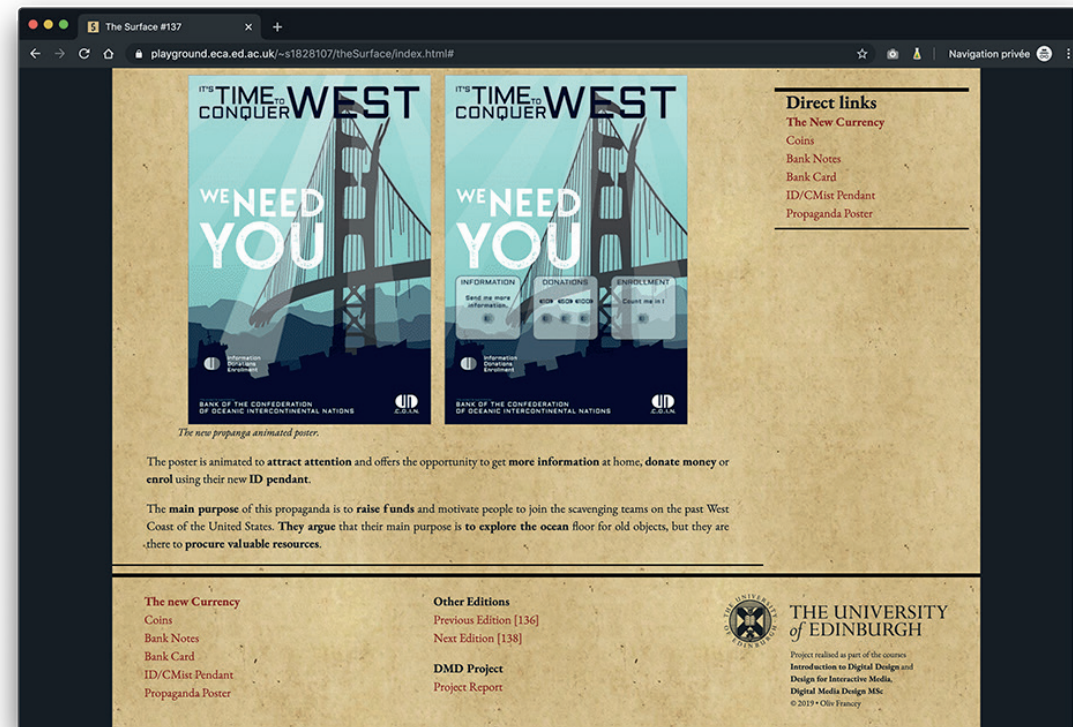


Figure 21: The Surface website, bottom of the page on desktop browser, with an image hovered

Word count: 825

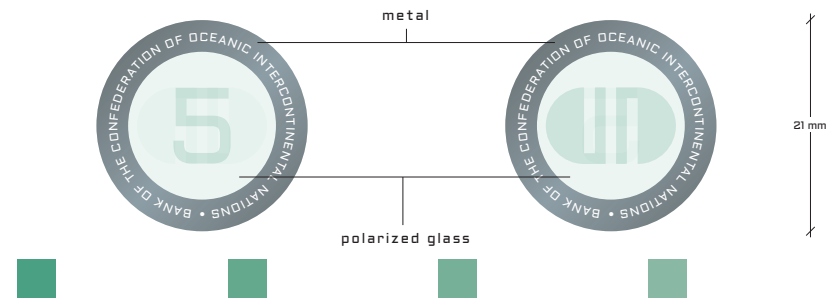
Annexe

Presentation of the currency and the poster

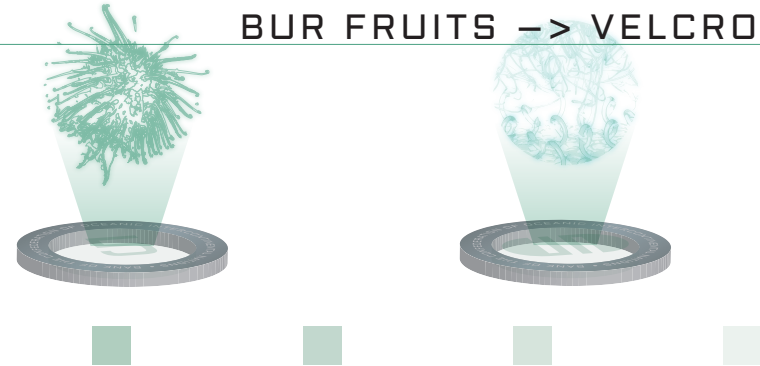
BANK OF THE CONFEDERATION OF OCEANIC INTERCONTINENTAL NATIONS THE COINS

This series is inspired by biomimicry

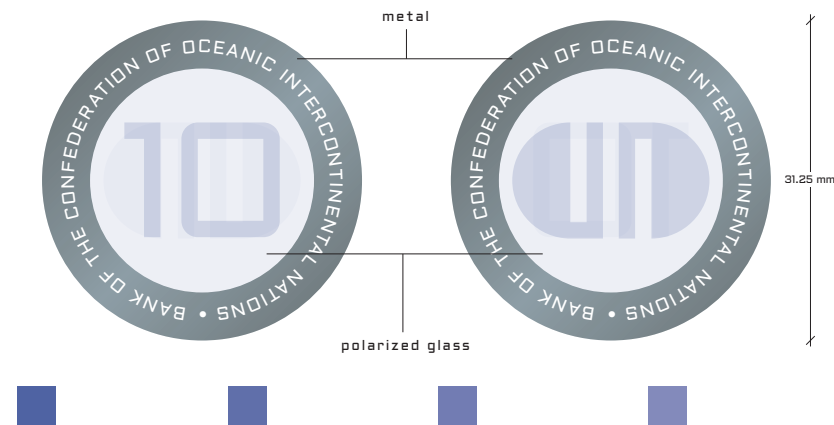
USD COIN



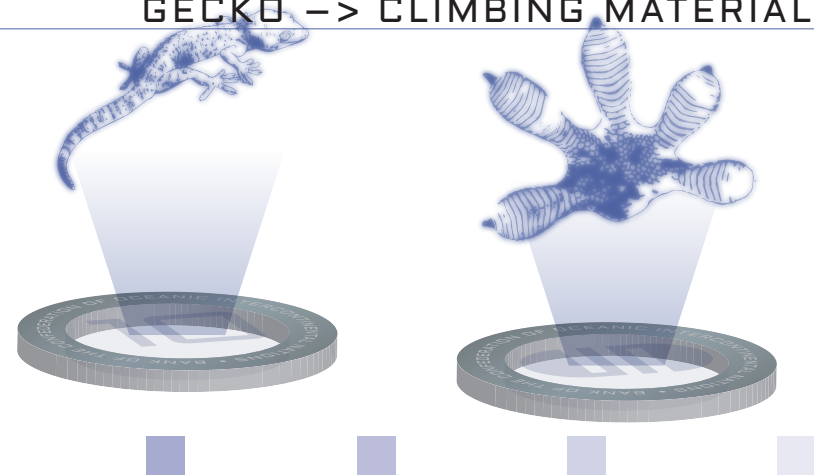
BUR FRUITS -> VELCRO



100 COIN



GECKO -> CLIMBING MATERIAL



BANK OF THE CONFEDERATION OF OCEANIC INTERCONTINENTAL NATIONS THE BANK NOTES

This serie is inspired by biomimicry

The bank notes are printed on synthetic paper made from seaweed

1000 BANK NOTE

PHYTOPLANKTON -> ARTIFICIAL PHOTOSYNTHESIS



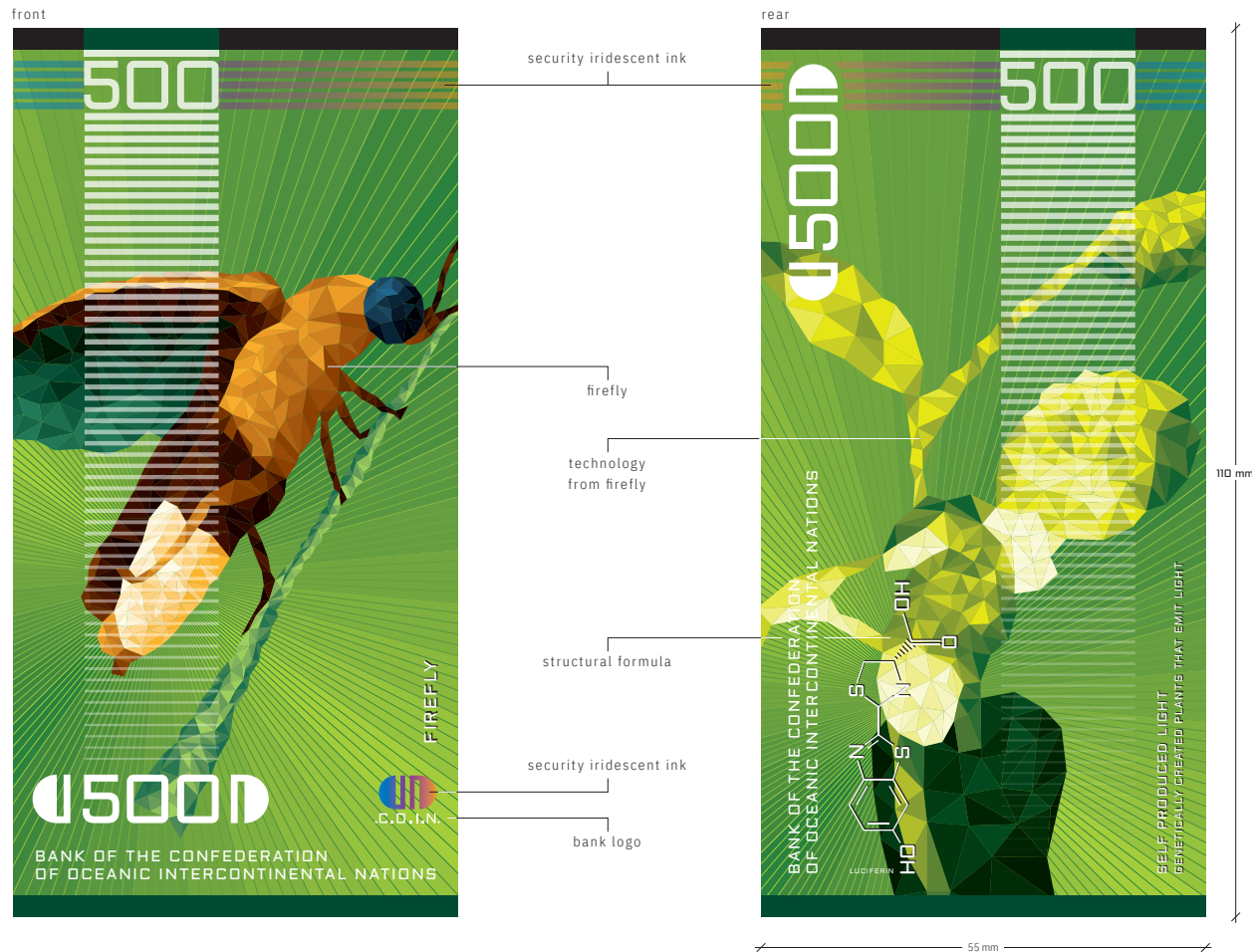
BANK OF THE CONFEDERATION OF OCEANIC INTERCONTINENTAL NATIONS THE BANK NOTES

This serie is inspired by biomimicry

The bank notes are printed on synthetic paper made from seaweed

1500 BANK NOTE

FIREFLY -> SELF PRODUCED LIGHT

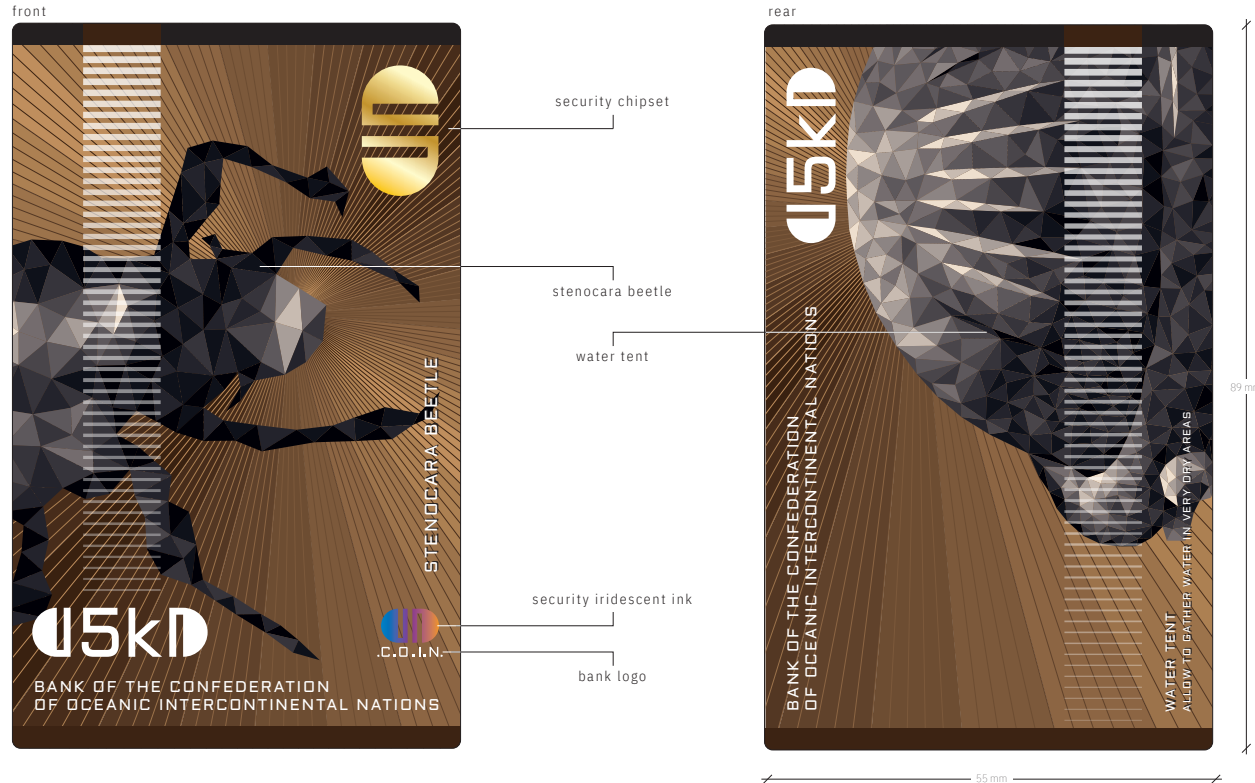


BANK OF THE CONFEDERATION OF OCEANIC INTERCONTINENTAL NATIONS THE BANK CARD

This serie is inspired by biomimicry
The bank card is made of metal

15k BANK CARD

STENOCCARA BEETLE → WATER HARVESTING



BANK OF THE CONFEDERATION OF OCEANIC INTERCONTINENTAL NATIONS THE ID/C-MIST PENDANT

This serie is inspired by biomimicry

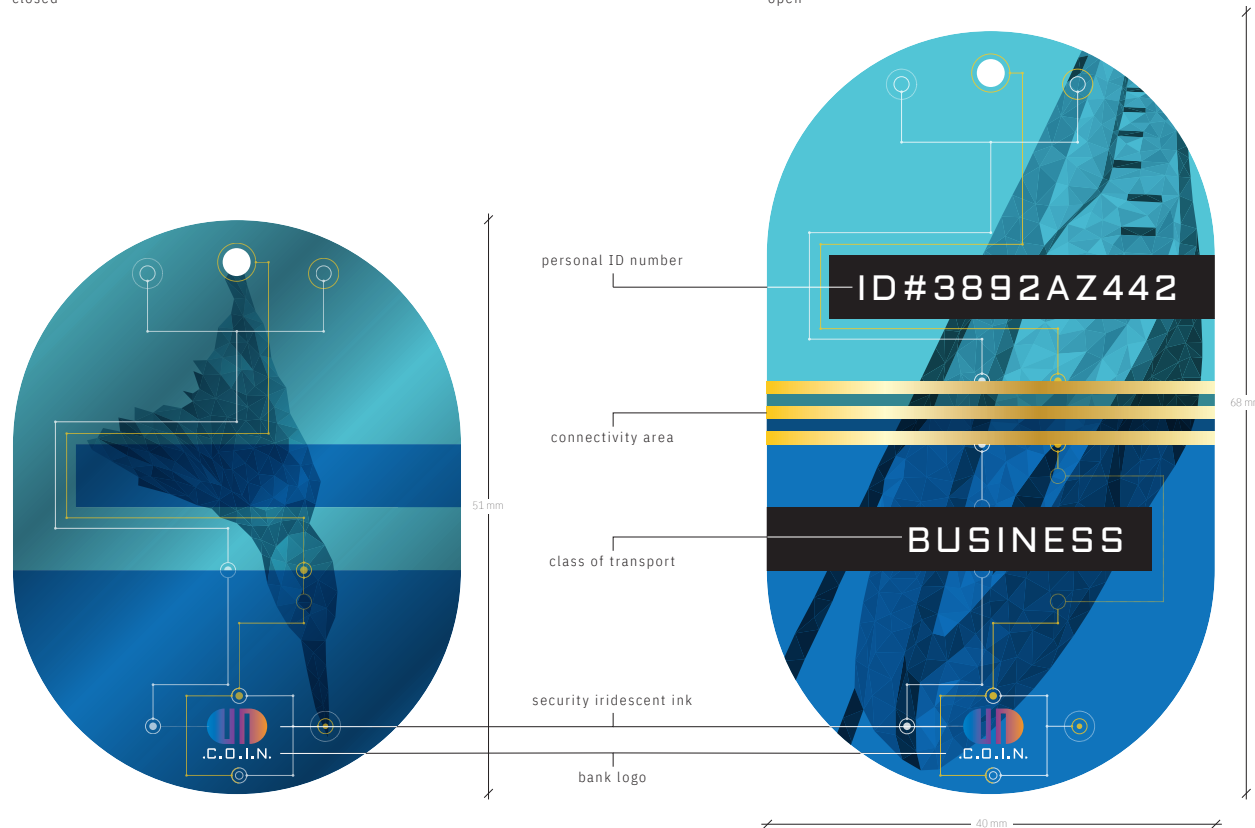
The pendant is made of metal and is also a display

ID/C-MIST PENDANT – FRONT

KINGFISHER -> AERODYNAMIC PROFILING

closed

open



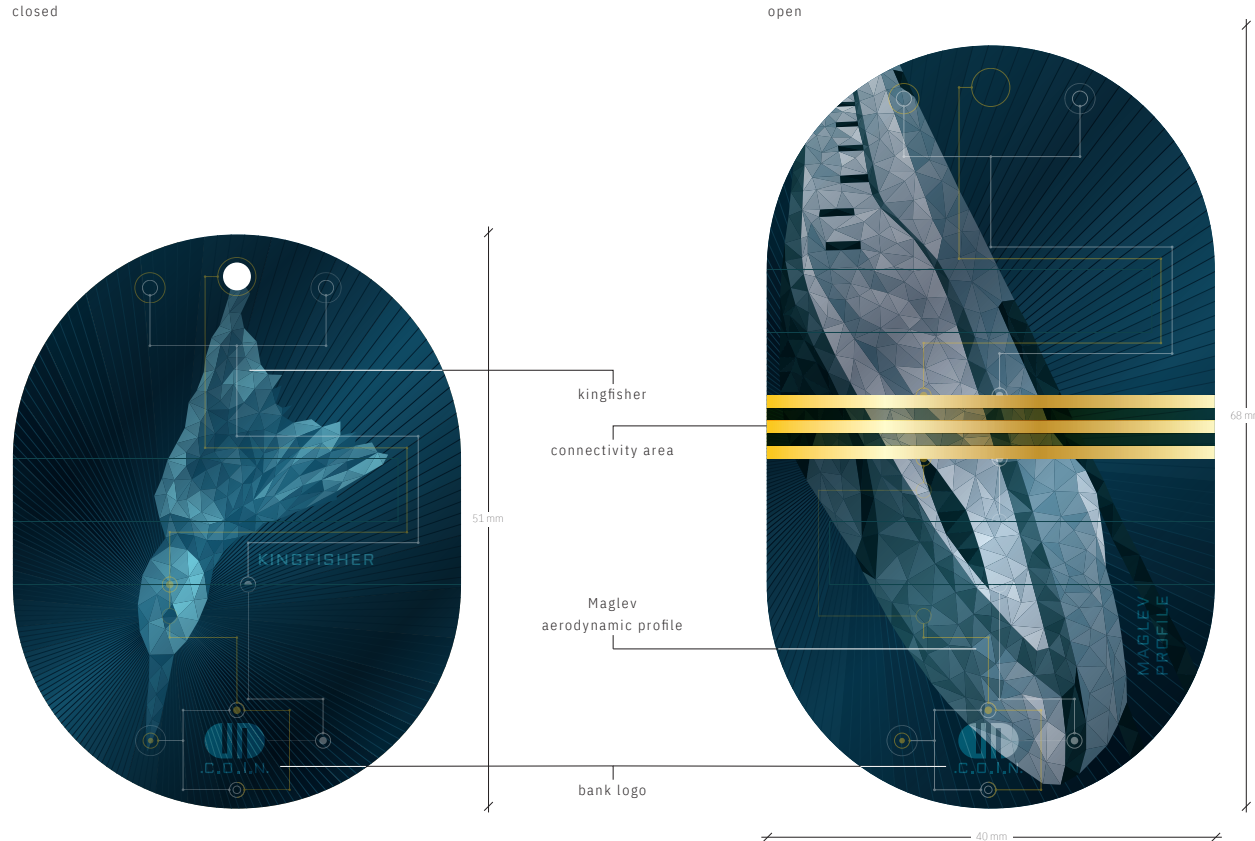
BANK OF THE CONFEDERATION OF OCEANIC INTERCONTINENTAL NATIONS THE ID/C-MIST PENDANT

This series is inspired by biomimicry

The pendant is made of metal and is also a display

ID/C-MIST PENDANT – REAR

KINGFISHER -> AERODYNAMIC PROFILING



BANK OF THE CONFEDERATION OF OCEANIC INTERCONTINENTAL NATIONS PROPAGANDA POSTER

This poster is linked to the Fringe Artefacts Exhibition
It is animated and interactive

PROPAGANDA POSTER



Introduction to Digital Design

Biomimicry inspired and secured new currency

Oliv Francey [S1828107]