



## Project Dossier.

A portfolio, refined and true,  
Shows thoughtful work in view.



# 1 Profile

Something about designing around constraints, overcoming adversity, piques my interest.

With a keen eye for detail, I'm passionate about crafting great experiences, focusing on attributes not commonly associated with design.

All it takes is just a good cup of Badam Milk to get started.

# 2 Education Pathway

## Home Institution



High School Diploma  
**Product & Industrial Design**

June '14 - April '17  
Temasek Polytechnic  
Singapore, Singapore



Laurea Triennale; Bachelor of Science  
**Product Industrial Design**

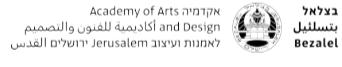
September '20 - March '24  
Politecnico di Milano  
Milan, Italy



Master of Science  
**Data Visualization**

August '24 - May '25  
The New School Parsons  
New York City, United States

## Semester Abroad



ERASMUS Exchange - Bachelor of Design  
**Industrial Design**

February '22 - June '22  
Bezalel Academy of Arts & Design  
Jerusalem, Israel



Aalto Summer School  
**Circular Economy**

Summer '23  
Aalto University  
Helsinki, Finland



SDG Global Summer School  
**Data Visualization**

Summer '23  
Zhejiang University  
Hangzhou, PR China



Athens Programme  
**3D Metrology**

Winter '23  
Czech Technical University  
Prague, Czech Republic



ERASMUS Exchange - Bachelor of Science  
**Industrial Design**

February '24 - April '24  
Middle East Technical University  
Ankara, Turkey

# wherever we are, I've got it.

3

## Proficiencies

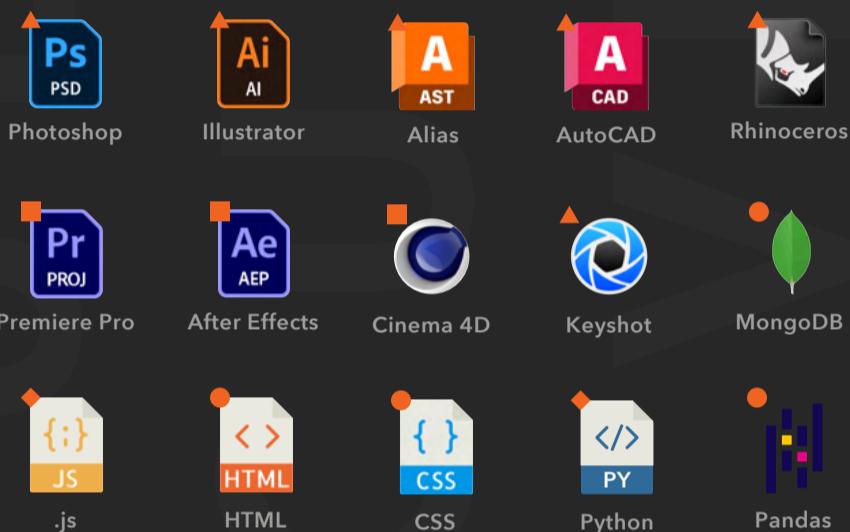
### Softwares

◆ Exposure

● Novice

■ Moderate

▲ Fluent



### Linguistics

English      Proficient

Chinese      Proficient

Italian      Proficient

4

## Work Experience

### BreadTalk Group Ltd.

Internship

Apr - Sep '16

Design Visualisation   Design Advertisement

### Hustle & Bustle Pte. Ltd.

Exhibition Designer

Sep - Mar '20

Design Research   Conceptualisation

Rapid Prototyping

### Salone del Mobile '24

Translator - Interpreter

Apr '24

Linguistics Translation

### Prada S.p.A

Exhibition Designer

Nov '22 - Mar '24

Event Management   Conceptualisation

5

## International Exposure

Singapore, Singapore • Tokyo, Japan • Guangzhou, China • Helsinki, Finland  
Ho Chi Minh City, Vietnam • Milan, Italy • Jerusalem, Israel • Hangzhou, China  
Ankara, Türkiye • New York City, United States

ch 3

## Exhibitions ●

An exhibition draws the crowd,  
Where art and stories speak loud.

ch 4

## Data Visualisation ▲

Data visualized clear and bright,  
Turns numbers into insight.

## INDEX



SYSTEM



IDENTITY

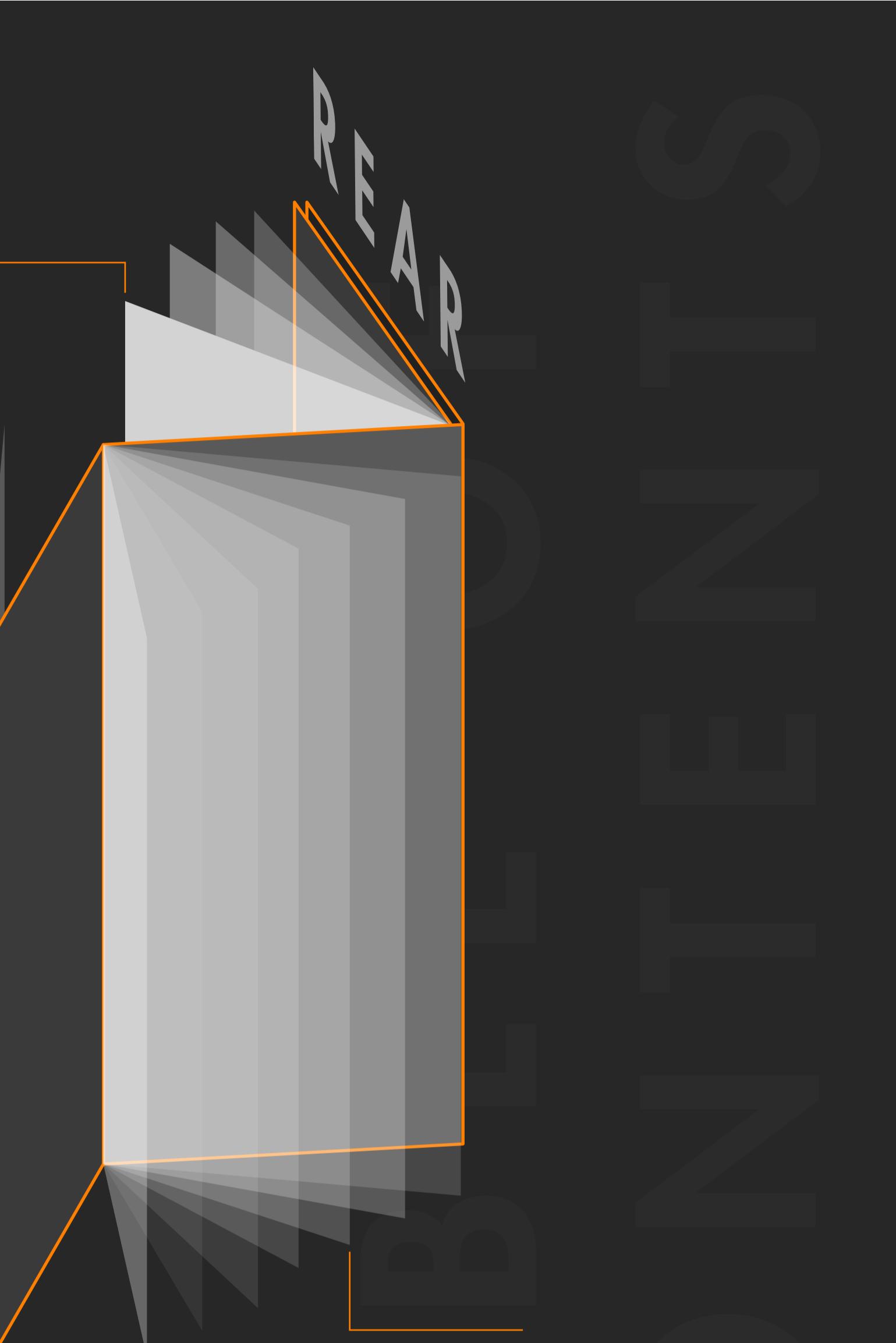


STUDIO



EXPERIMENTAL

FRONT



REAR

ch 2

## Banknotes



A banknote travels far in hand,  
Telling tales only money can brand.

ch 1

## Introduction

Résumé

Industrial Design



D U

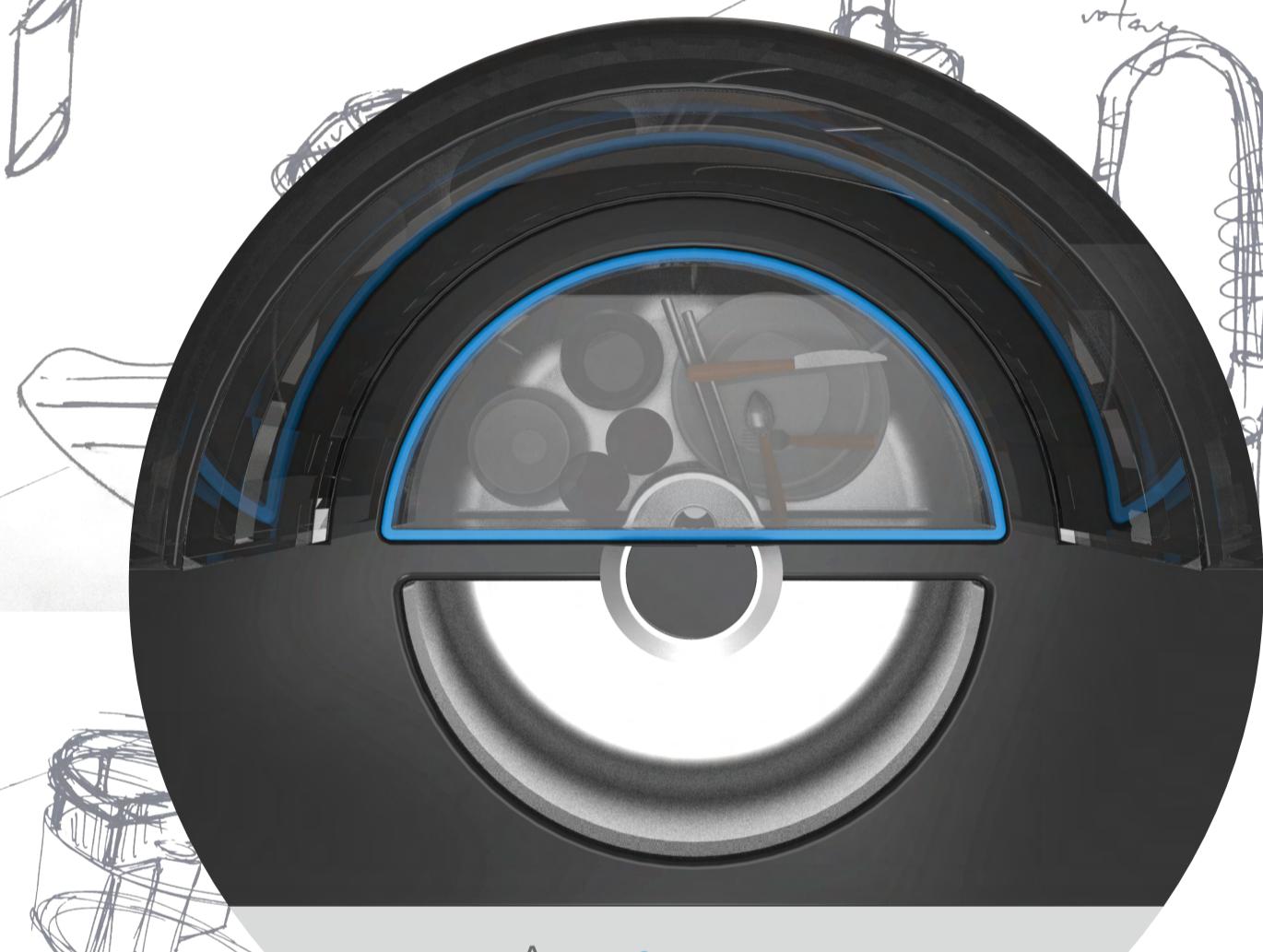
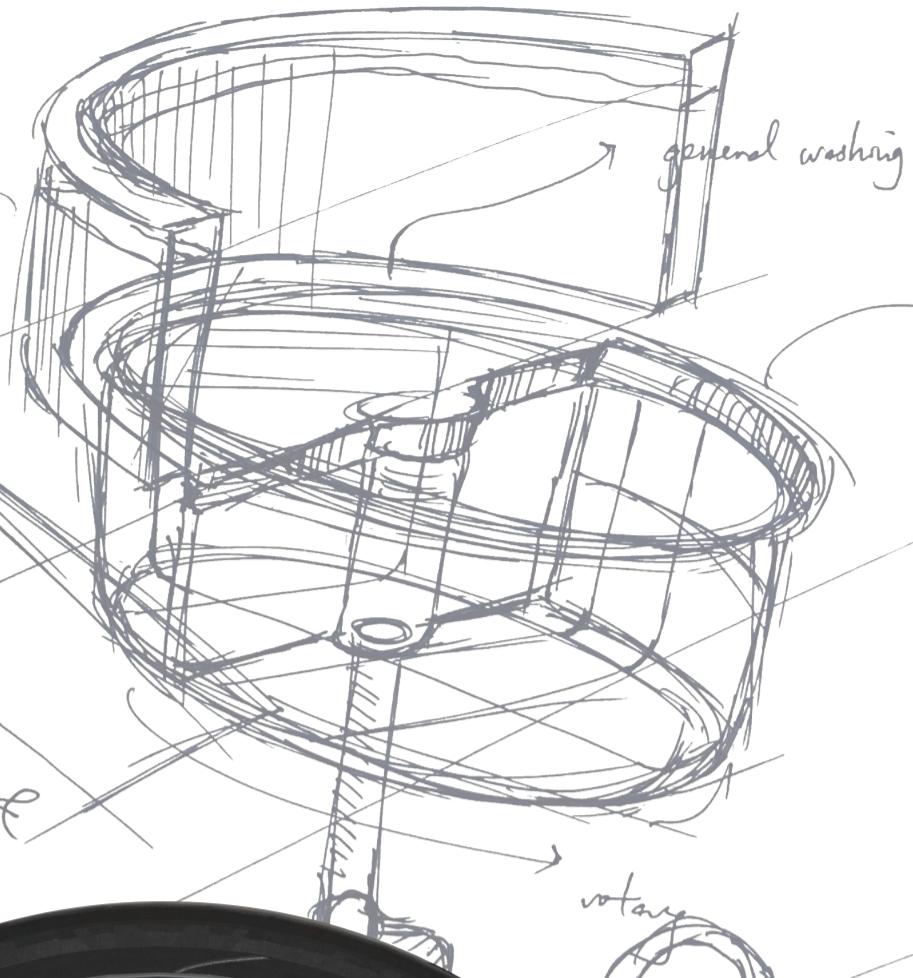
## Arroyo. Rotary Dishwasher.

A dishwasher built in the sink,  
Revolves to clean in a blink.

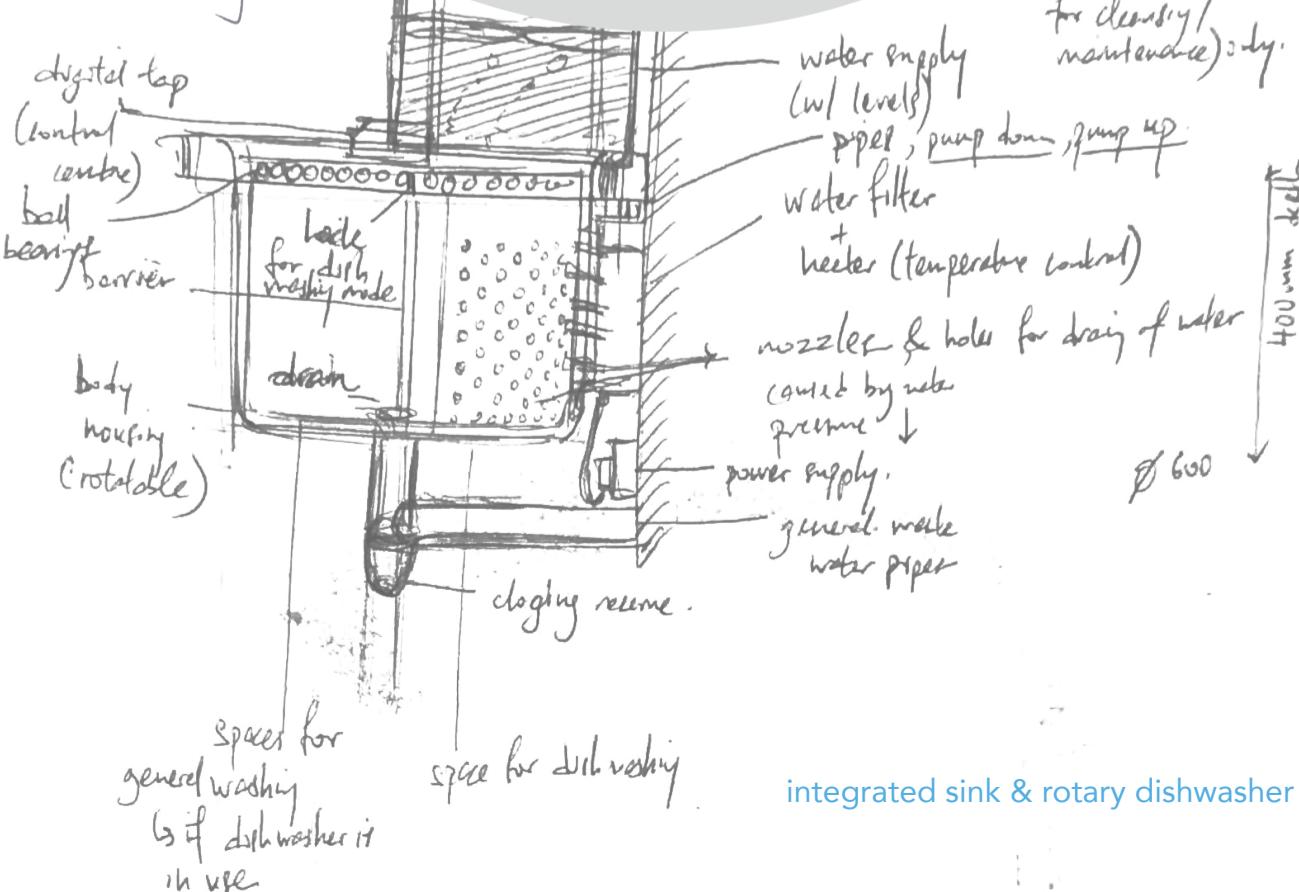
S T

Rotary Dishwash 1:2

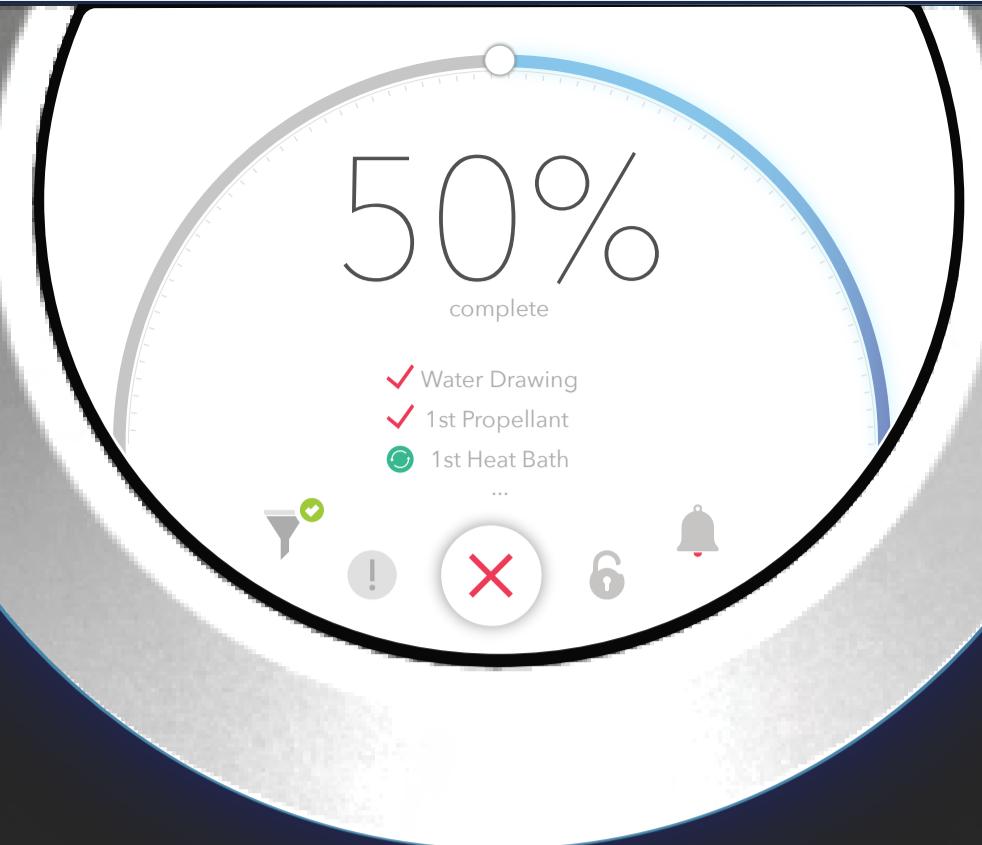
(constant water usage) Water level sensor



# Arroyo

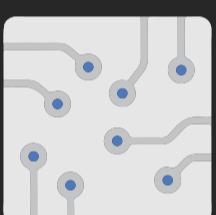


integrated sink & rotary dishwasher



# Welcome

Join us to build a smarter home



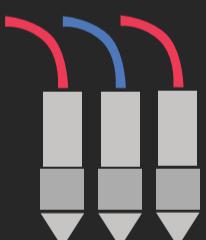
## Integrated Systems

A closed-circuit ecosystem, with completely self-sufficient water usage. Faucet, dishwasher employs water from the same source.



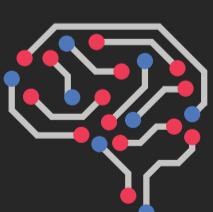
## Dynamic Sensors

Use of sensors to detect system faults, leakages and potential failures to create early warning for repairs and replacement.



## Multi-faceted Nozzles

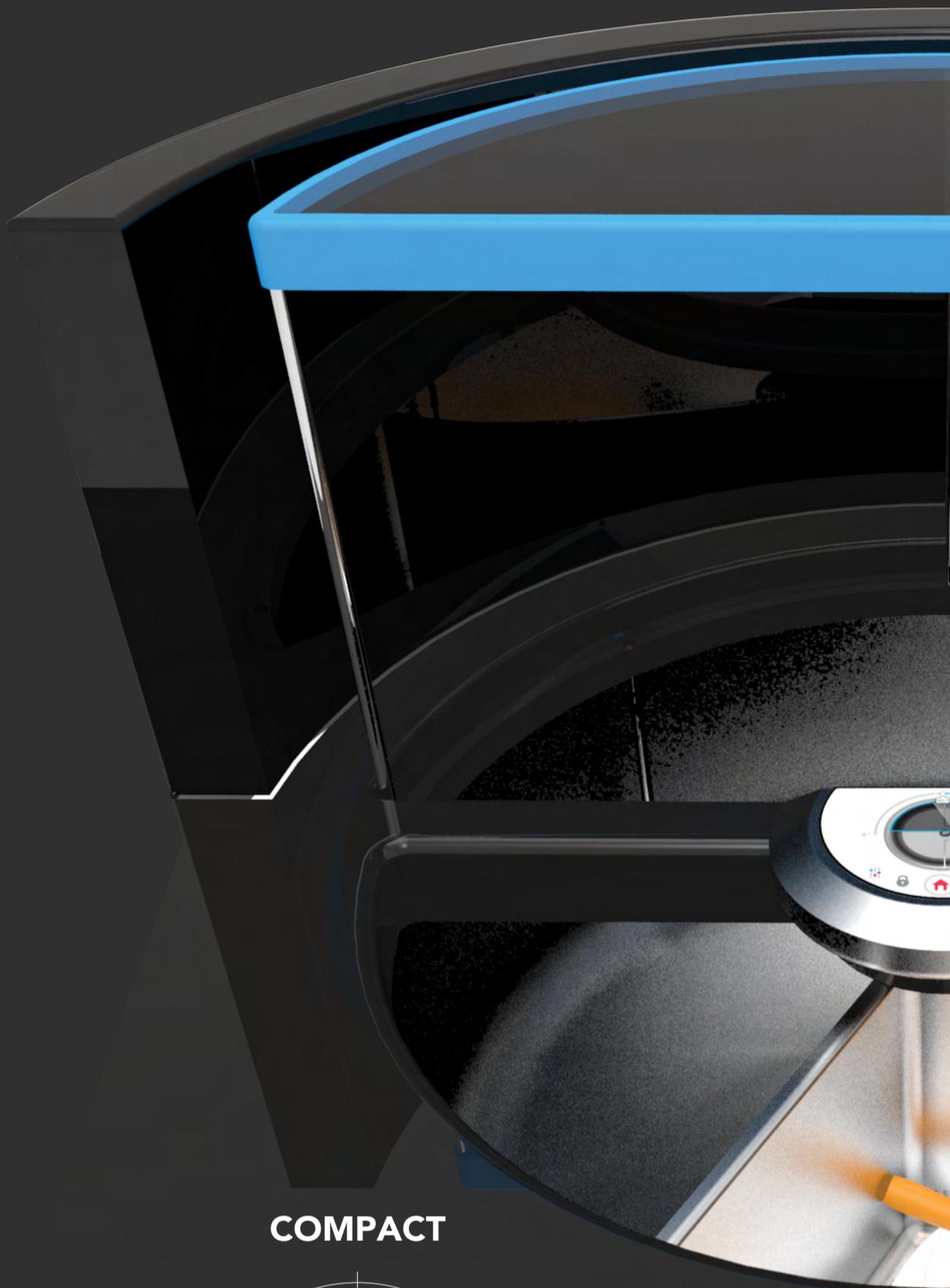
Simultaneous high-pressure water bombardment at multiple angles to ensure maximum efficiency in the usage of water for cleansing.



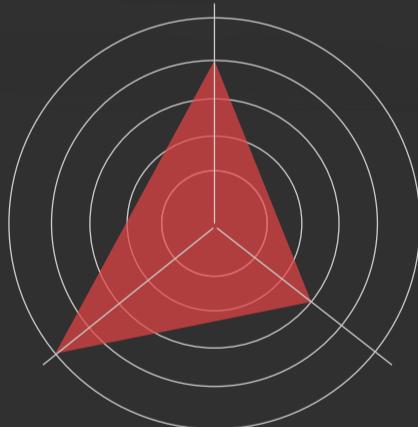
## Artificial Intelligence

Employment of A.I for detection of varying types of food stains and kitchenware materials for optimal cleansing techniques.

[Get Started](#)



## COMPACT

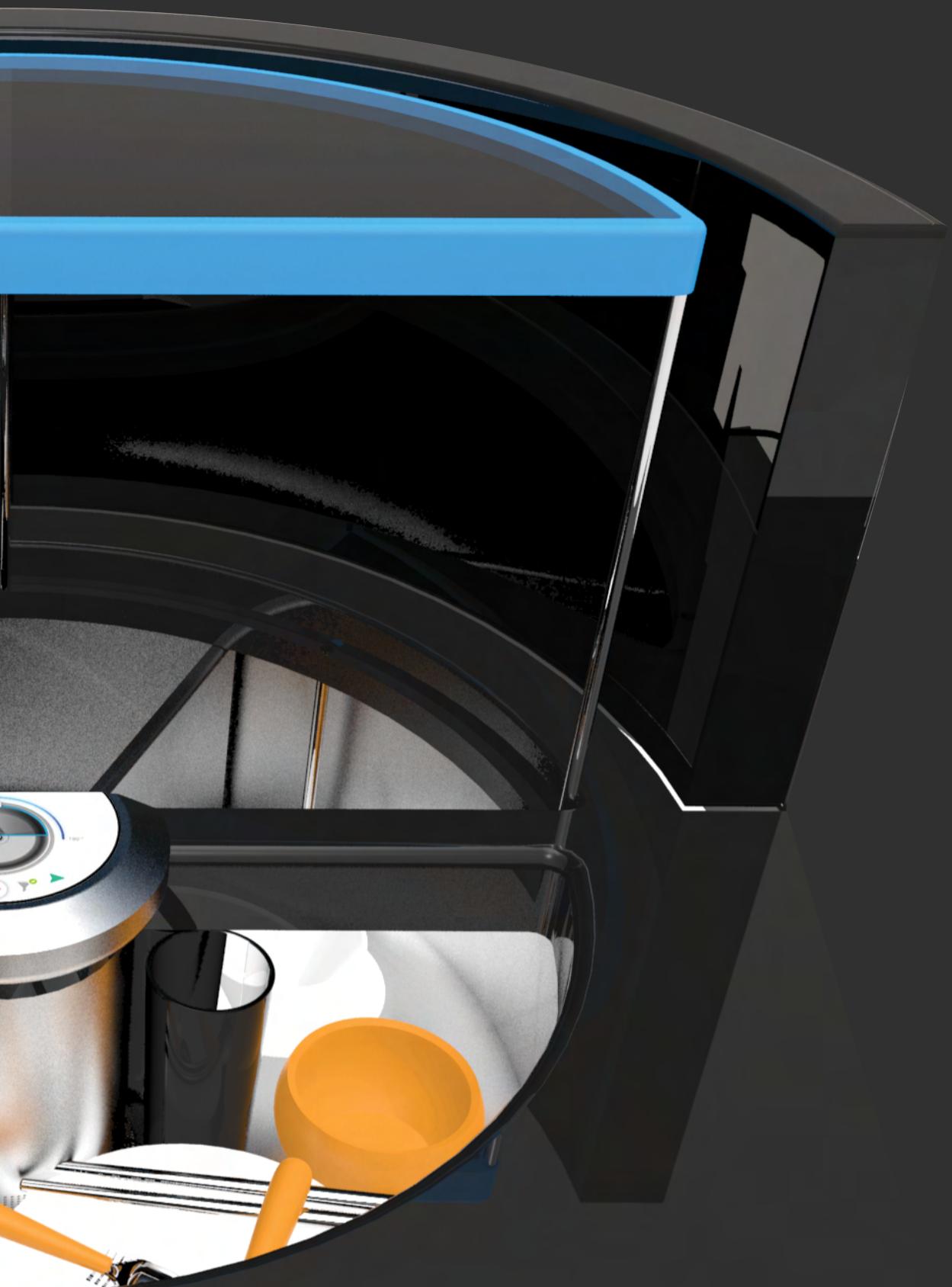


## MULTIFUNCTIONAL

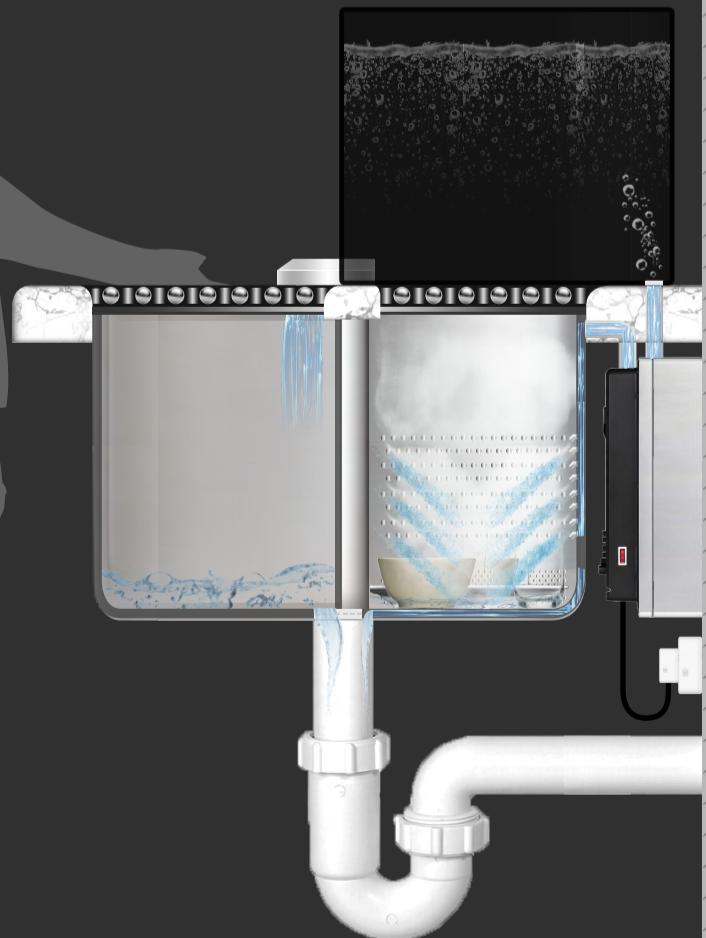
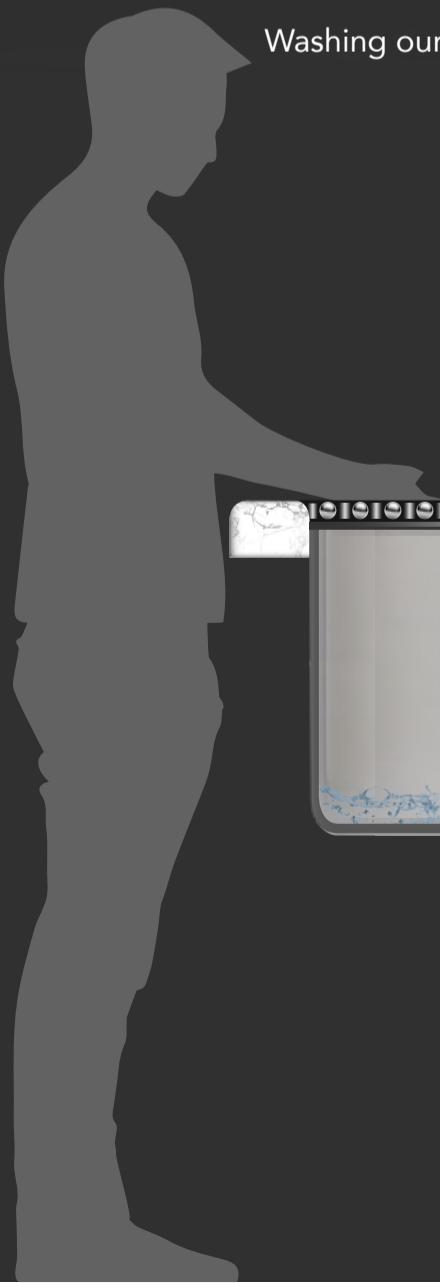
## ECO-SUSTAINABLE

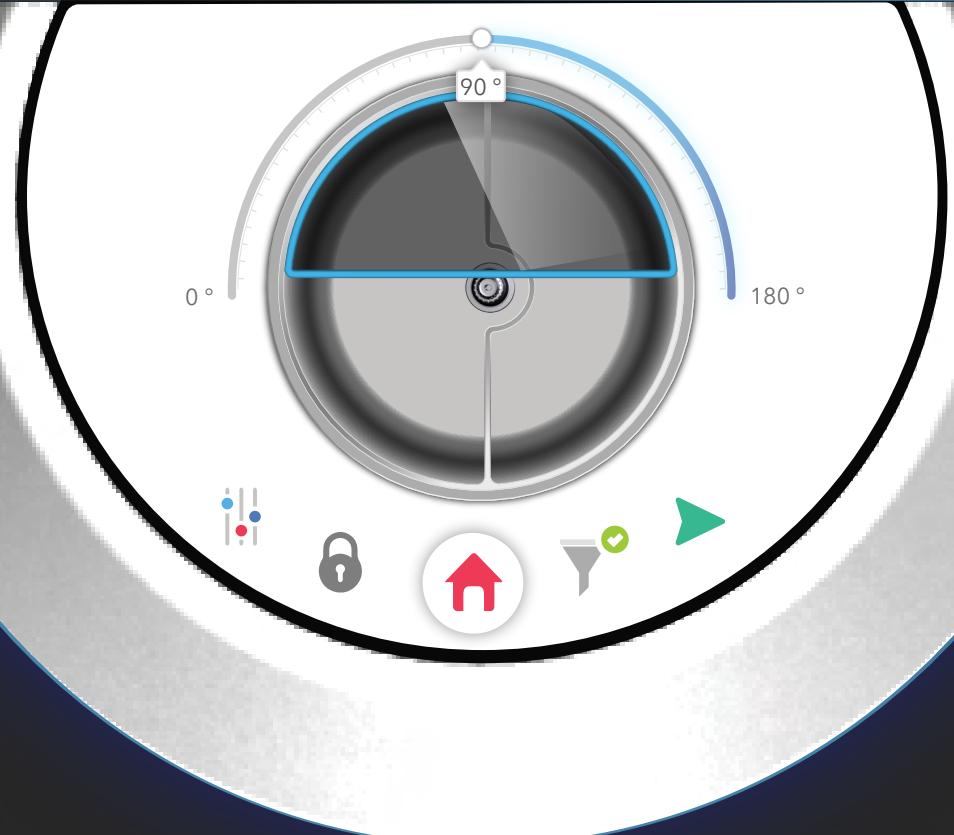
With a faucet and dishwasher hybrid, our kitchen routine just gotten so much neater and efficient. The major design overhaul has allowed it to command such a compact form factor.

As we are now able to witness how our cutlery are cleaned without worrying about disrupting the entire process. It will be possible to terminate the cycle if any errors are spotted.



Washing our hands while a dishwashing cycle is activated





Manual Mode



Quick Wash



Maintanance Mode



Settings

Open Top Hatch



Filter Replacement



Haptic Tap



Allow Notifications



Notifications

Visual Notifications

Idle Mode



Loading Pulse



Error Alert



Completion Feedback



Presets

For Ceramic

Wash Duration 20 °C

1h 50 min 60 Psi

Preset

Manual

20 °C Water Temperature

1h 35 min Wash Duration

60 Psi Waterjet Pressure

20 120 + Heat Up/Cool Down 10 min

+ Water Draining 5 min

Total Duration

1h 50min



Filter Status



System Error



Lock/Unlock Compartment



System Notification

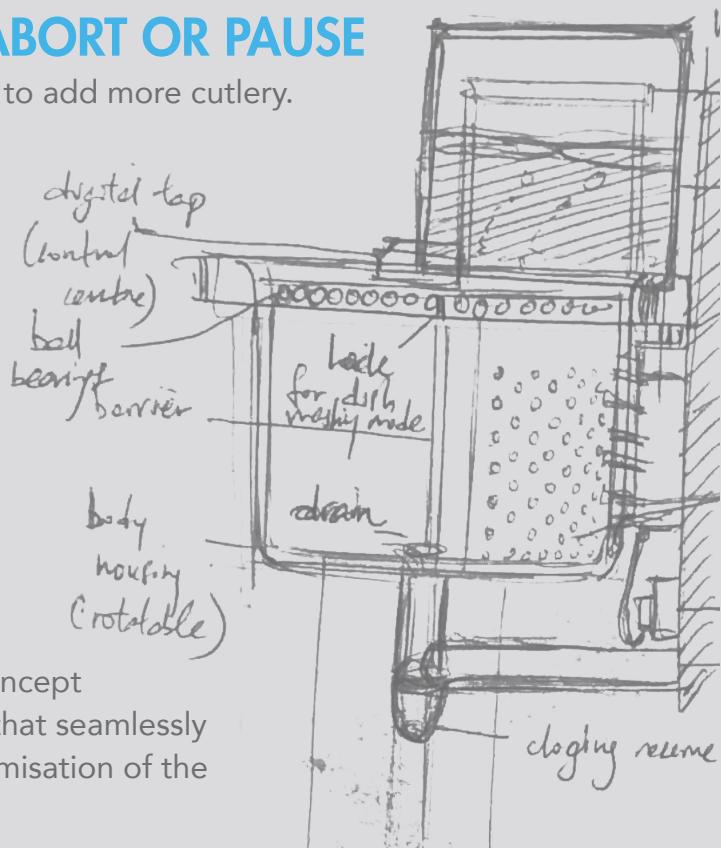
# SPEED UP, REPEAT, ABORT OR PAUSE

whenever a change in mind or to add more cutlery.

## DISHWASHER-SINK INTEGRATION

The rotating basin features dual purposes: functioning as both a sink and a dishwasher.

The project begins with a comprehensive research of space constraints within a modern apartment to initial concept sketches to visualise a design that seamlessly combines practicality and optimisation of the kitchen space.



## DYNAMIC CONTROL CENTRE

Central to this design is a control center with a touch interface managing the entire cleaning cycle and facilitating seamless switching between sink and dishwasher modes.

The touch interface provides control over cycle types, water temperature, and cleaning intensity, allowing users to tailor the washing process to their specific needs.

The rotating mechanism is designed with user safety in mind, ensuring smooth transition, with sensors and a secure seal during dishwasher mode to prevent leaks.





## 1 INACTIVE

Use the faucet as per normal

In this stage, the user uses the sink for regular tasks like washing hands or rinsing fruits.

With a tap on the control center, the user activates the rotation, seamlessly switching the sink into dishwasher mode.

Sensors ensure that the transition is safe, providing an audible alert when the unit is fully locked in dishwasher mode.

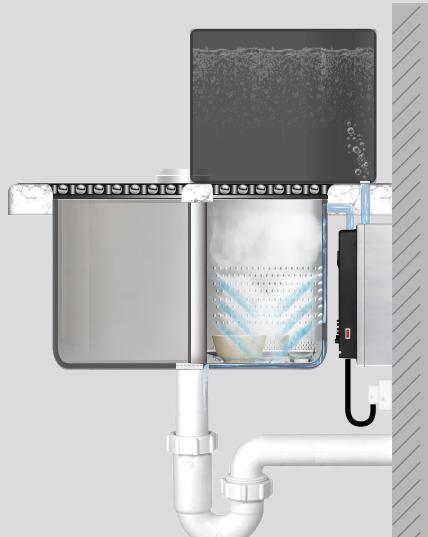


## 2 PREPARING TO CLEAN

Load in cutlery and plates.

Once in dishwasher mode, the user loads dishes into the rotating basin. The user selects the desired cycle, customizing water temperature and washing intensity.

The dishwasher then initiates the cleaning process, with real-time updates visible on the touch screen, showing the estimated time remaining and cycle progress.



## 3 CLEANSING

Set and begin process

During the active cleaning stage, the integrated dishwasher utilises a rotating spray arm and targeted jets to efficiently clean dishes from multiple angles.

Advanced sensors monitor water pressure and temperature, while adjusting the cycle based on load weight or detected debris. The display provides notifications if any adjustments or issues arise during the cycle.



## 4 AFTER CLEANING

Unload cutlery and plates.

Upon completion of a cycle, the control center alerts the user with a melody. It then prompts the user to either let the dishes air-dry in place or remove them immediately.

After removing the dishes, the user can switch back to sink mode, smoothly transitioning back into a sink, ready for use, with all traces of its previous dishwasher role hidden beneath.

D U

## Watergen. Alpha.

A dispenser that draws from the air,  
Turns vapor to water, pure and fair.

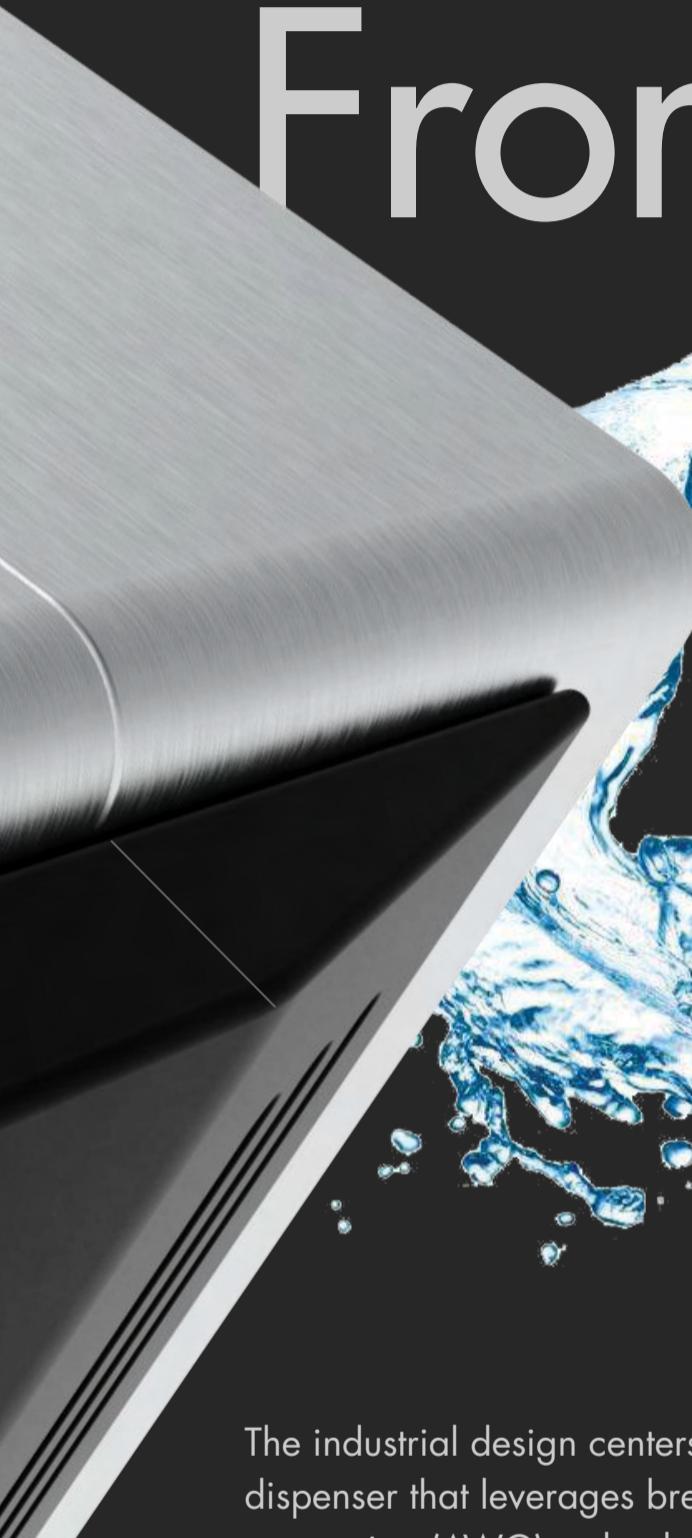
S T



DESIGNED IN ISRAEL

DESIGNED IN ISRAEL

# Water From Air.



The industrial design centers around a state-of-the-art water dispenser that leverages breakthrough atmospheric water generation (AWG) technology. This innovation extracts water molecules directly from the surrounding air, condensing them into clean, potable water. T

The project's process begins with in-depth research into AWG capabilities and user needs, followed by concept development that balances aesthetics, functionality, and environmental impact. The design phase includes prototyping a sleek, user-friendly interface and an efficient, energy-saving mechanism for optimal performance in various climates.

Testing ensures durability, water purity, and seamless integration into both residential and commercial settings, prioritizing sustainability and accessibility.

Child Module

# GEN α

Water. From Air.



The system is designed with a "mother and child" structure, where the "mother" unit purifies air and generates water from atmospheric moisture, while the "child" unit is responsible for dispensing filtered water for drinking.



Water Generator



Vending Machine



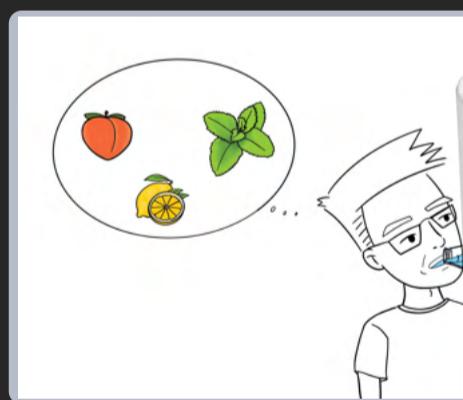
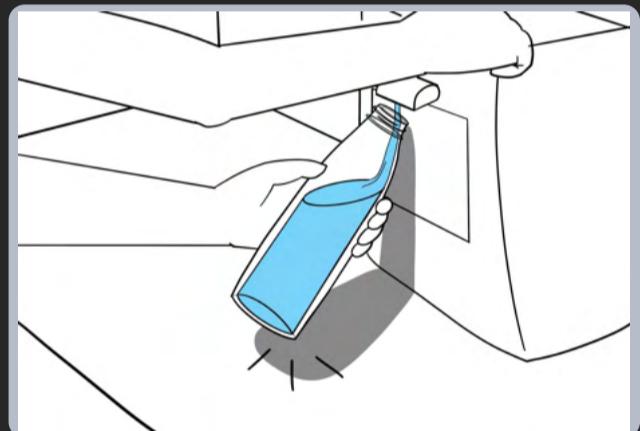
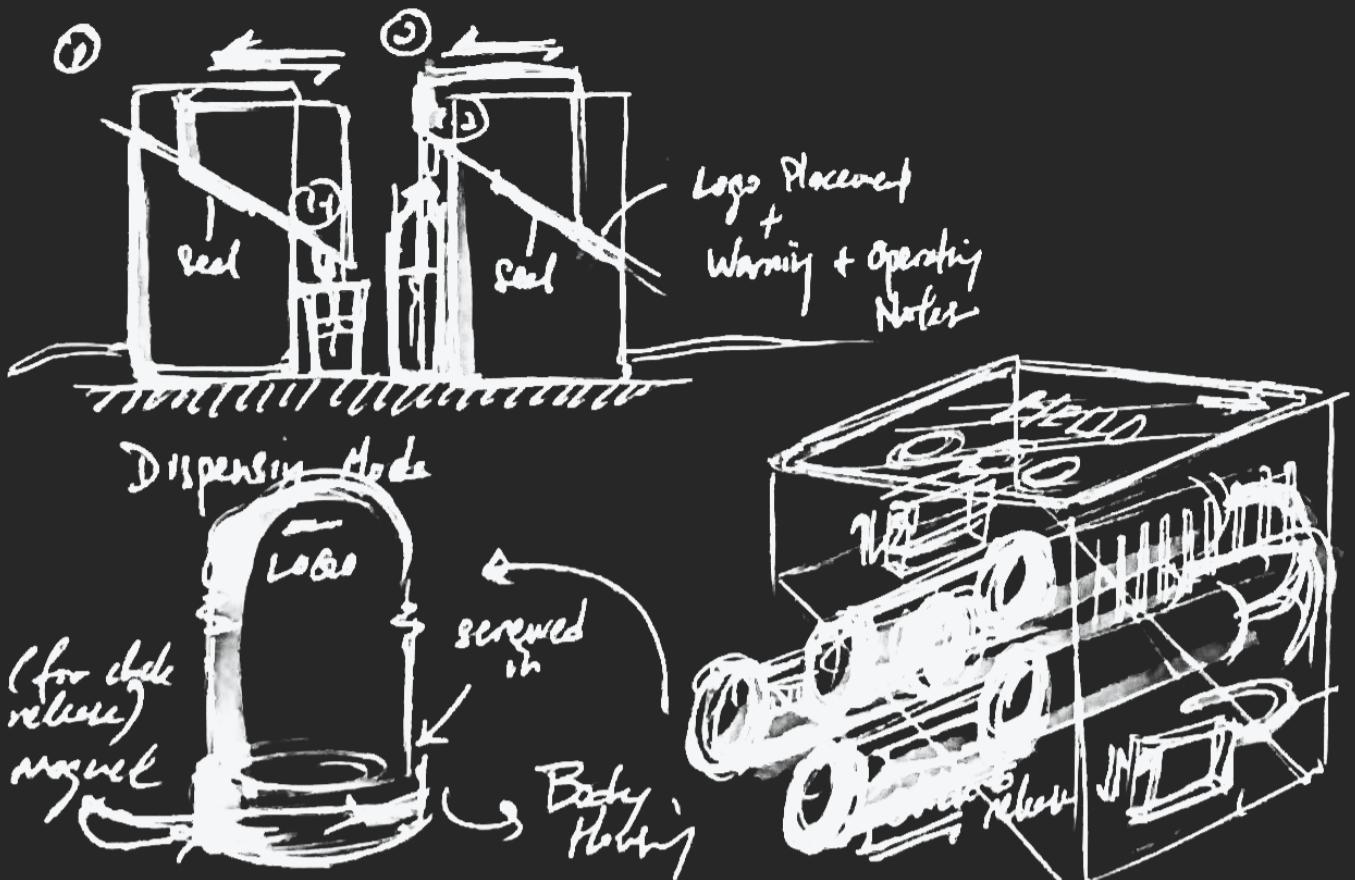
(De)Humidifier



The "child" unit, as the user-facing module, is connected directly to the mother unit, it receives purified water on demand, incorporating features such as haptic touch feedback and water temperature customisation.

Its streamlined, inconspicuous design is crafted to fit comfortably in common spaces like kitchens, offices, or waiting areas, allowing users to easily access fresh, clean water at any time.

All while the mother handles the sophisticated, behind-the-scenes work of water extraction and purification.



## HYDRATION THROUGH FLAVOURED WATER

Flavored water adds a refreshing twist to hydration, making it more appealing and enjoyable for those who struggle with plain water.

Infused with natural fruit extracts, herbs, or subtle sweeteners, it provides a burst of taste without added sugars or artificial additives.

This simple enhancement encourages better hydration habits, promoting overall health and well-being.

DESIGNED IN ISRAEL

Colour
Pantone 11-1001 TCX

Material
ABS; Extruded

Finishing
Vacuum-Metal 60% Gloss

# Watergen

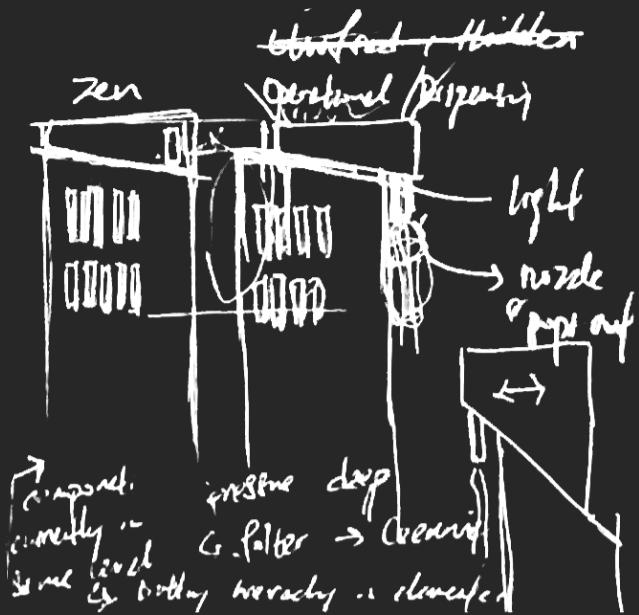
Rebranded logo featuring sleek metallic elements, enhanced with a geometric font for a bold and contemporary look, reflecting on the brand shifting focus to more a utilitarian look and feel.



The dispenser incorporates a slide mechanism designed to seamlessly adjust and accommodate bottles and cups of various heights and sizes.

With a simple sliding motion, the dispenser's platform can be raised or lowered to ensure an optimum fit for containers ranging from small cups to large bottles, ensuring convenience and preventing spills.

## ONLY WHEN YOU NEED IT.



A hidden nozzle that retracts when not in use, maintains a clean, utilitarian appearance and also protects it from dust and contaminants. This design not only contributes to hygiene but also adds a touch of sophistication to the overall aesthetic.

The combination of the adjustable slide mechanism and the concealed nozzle makes this water dispenser a modern, solution that balances practical use with elegance.



# ADAPTIVE. HYDRATION STATION



# VISUALISED FILTER PLACEMENT.

Featuring a control center where buttons for dispensing flavored water are marked in CMYK-inspired colors, this aligning with users' intuitive associations between flavors and their respective colors.

This design leverages familiar visual cues to enhance the user experience and streamline selection. A glowing line connects each flavor cartridge to its corresponding button, creating a clear visual pathway that aids in easy identification and replacement of cartridges.

This thoughtful integration ensures both user-friendly operation and efficient maintenance.

● ● ● **CMYK.**  
**NEVER LOSE TRACK**  
**AGAIN.**



1

2



## MAGNETISED ADHERENCE

1 Opening Hatch    2 Configure Flavour Cartridges    3 Replace/ Exchange Flavour Cartridges

This mechanism ensures secure attachment of the flavor cartridges, preventing leaks and dislodgement, while simplifying the process of replacing cartridges; users can easily detach and attach new cartridges with minimal effort. Additionally, alignment indicators guide the cartridge into its correct position.

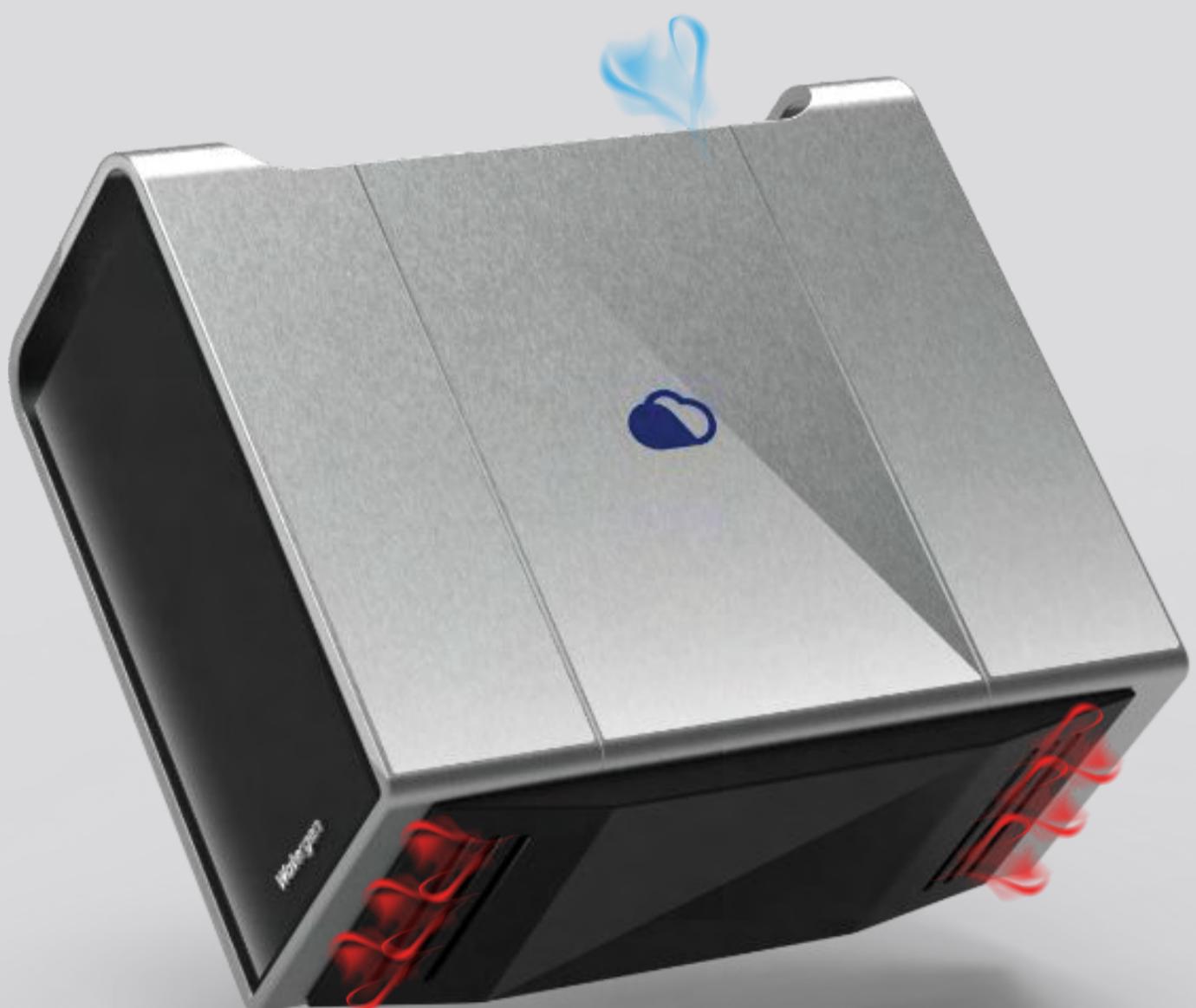
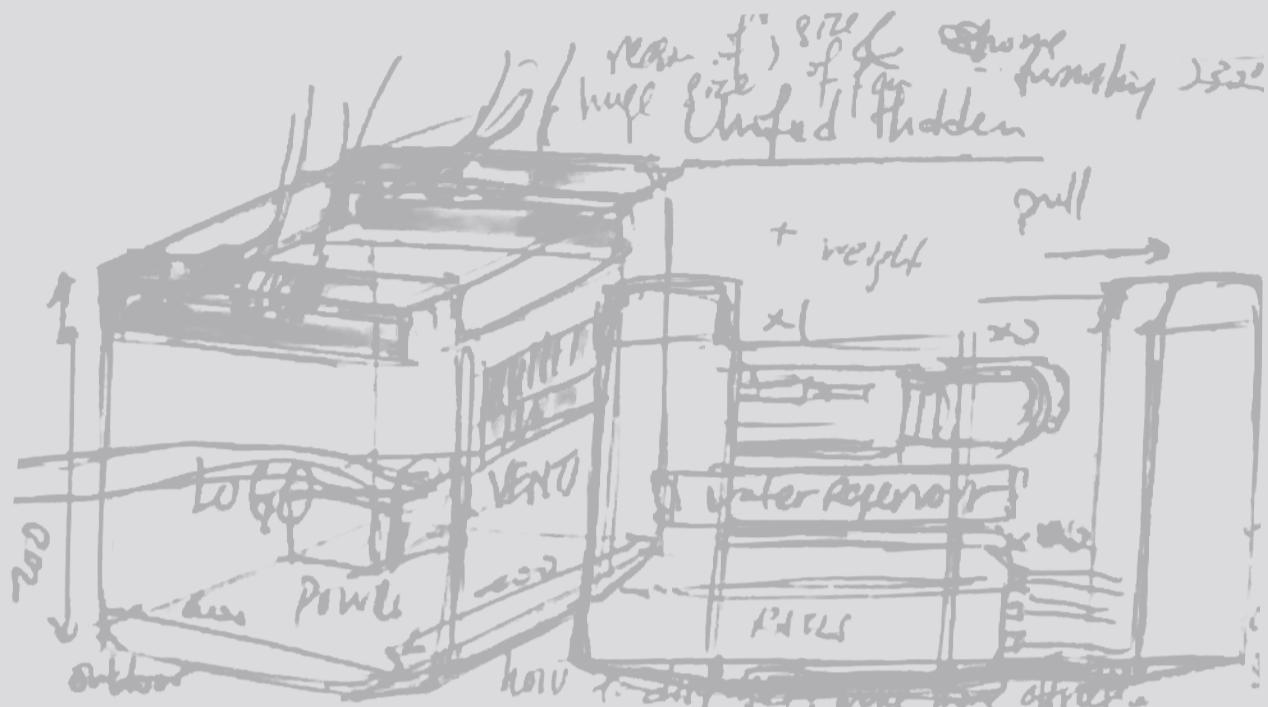
3



Mother Module

# GEN α

Water. From Air.



700(ht) x 775(wt) x 360(dt) mm

# ATMOSPHERIC WATER GENERATION HUB: ADVANCED MOTHER UNIT

The “mother” unit extracts and purifies moisture from air using advanced AWG technology. Equipped with energy-efficient systems and smart diagnostics, it provides reliable, high-quality water production.

**Integrated Handles**  
for ease of handling

**Air Inlet Fan**  
ventilation for atmospheric air

**AC Power Supply**  
main power supply

**Electrical Wiring**  
to Front End

**Water Piping**  
to Front End



The “Mother” unit serves as the core of the system, housing the atmospheric water generation (AWG) technology. It draws in atmospheric air, before condensing the moisture into water, and purifies the collected water through advanced filtration systems, ensuring it's safe and potable.

Designed to function independently, the mother unit continuously generates and replenishes water, adapting to humidity levels to maintain an efficient water production rate. Positioned out of sight or discreetly integrated within a space, the mother unit itself is a self-sustaining hub that supports the “Child” unit.



# **TECHNICAL SPECIFICATIONS:**

## **ADVANCED MOTHER UNIT:**

## **MAINTENANCE**

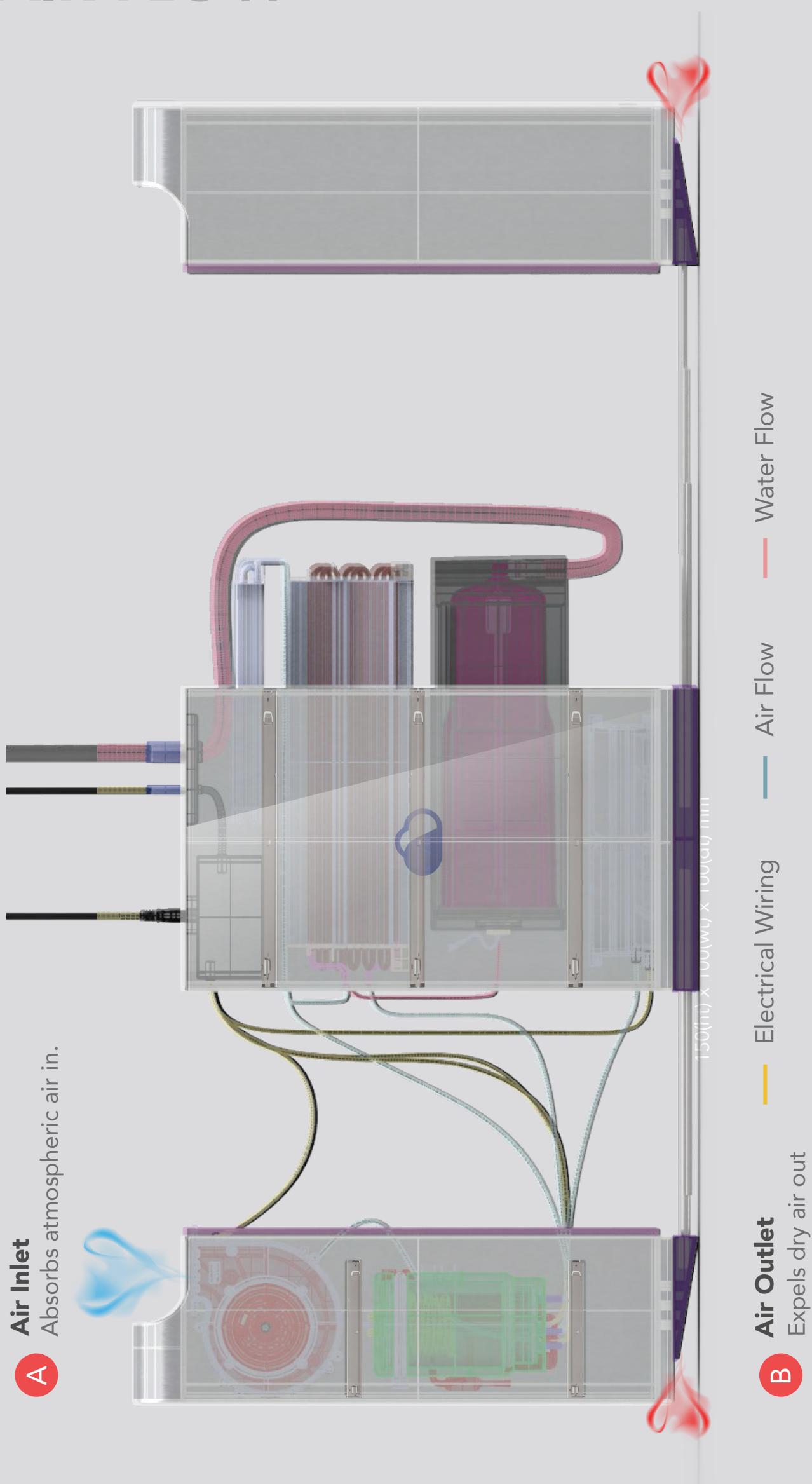
Designed to be straightforward and ensuring long-term performance with minimal effort, the unit features modular components that allow for easy access and replacement, including filters and condensation parts.

Automated alerts and smart diagnostics inform users when maintenance is required, such as filter changes or system checks. Regular upkeep involves basic cleaning and occasional replacement of key filters to maintain optimal water quality.

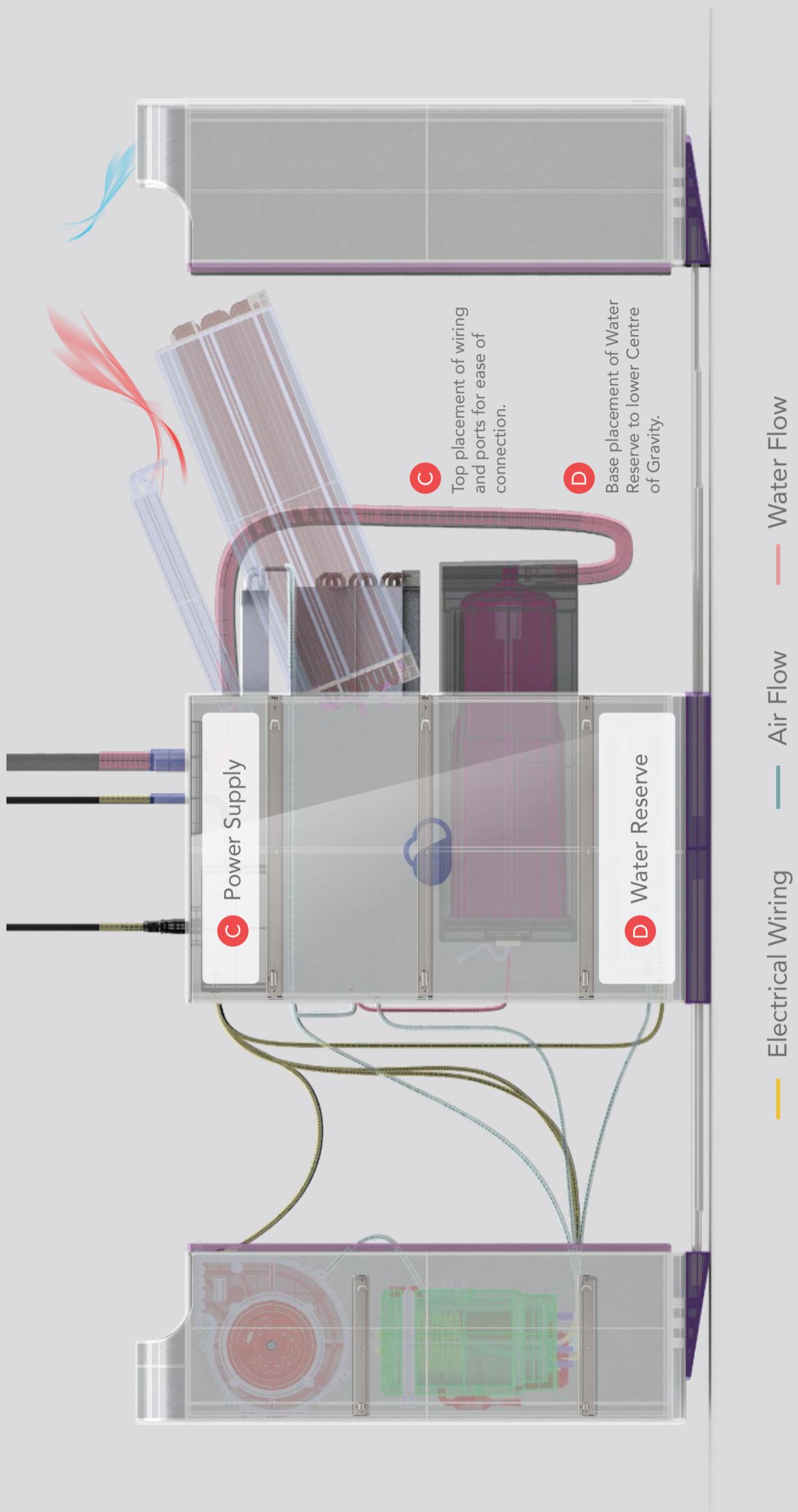


700(ht) x 775(wt) x 360(dt) mm

# TECHNICAL SPECIFICATIONS: AIR FLOW



# TECHNICAL SPECIFICATIONS: KEY COMPONENTS



# GEN α

Water. From Air.



B  
A

N  
K

## Bicentennial Singapore

A bicentennial note, rich in theme,  
Tells Singapore's tale, a nation's dream.

N  
O  
C



# Bicentennial

## **From Singapore to Singaporean**



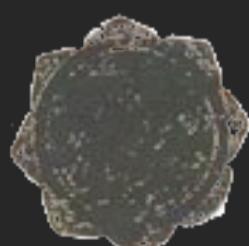
the amount collected from their  
Agents - The expenses of the  
Post and the collection of debts  
to be defrayed by the British  
Government.

Borne and concluded at  
Singapore the 8<sup>th</sup> day  
of February in the Year  
of our Lord 1819, according  
to the 11<sup>th</sup> day of the Month  
Rabbiathis and Year of  
the Hegira 1234.

مکہ، ری ایت کیت منور نہ کن تند  
ناہم سرت چھ کھٹ کد دا دالم  
فرط لان



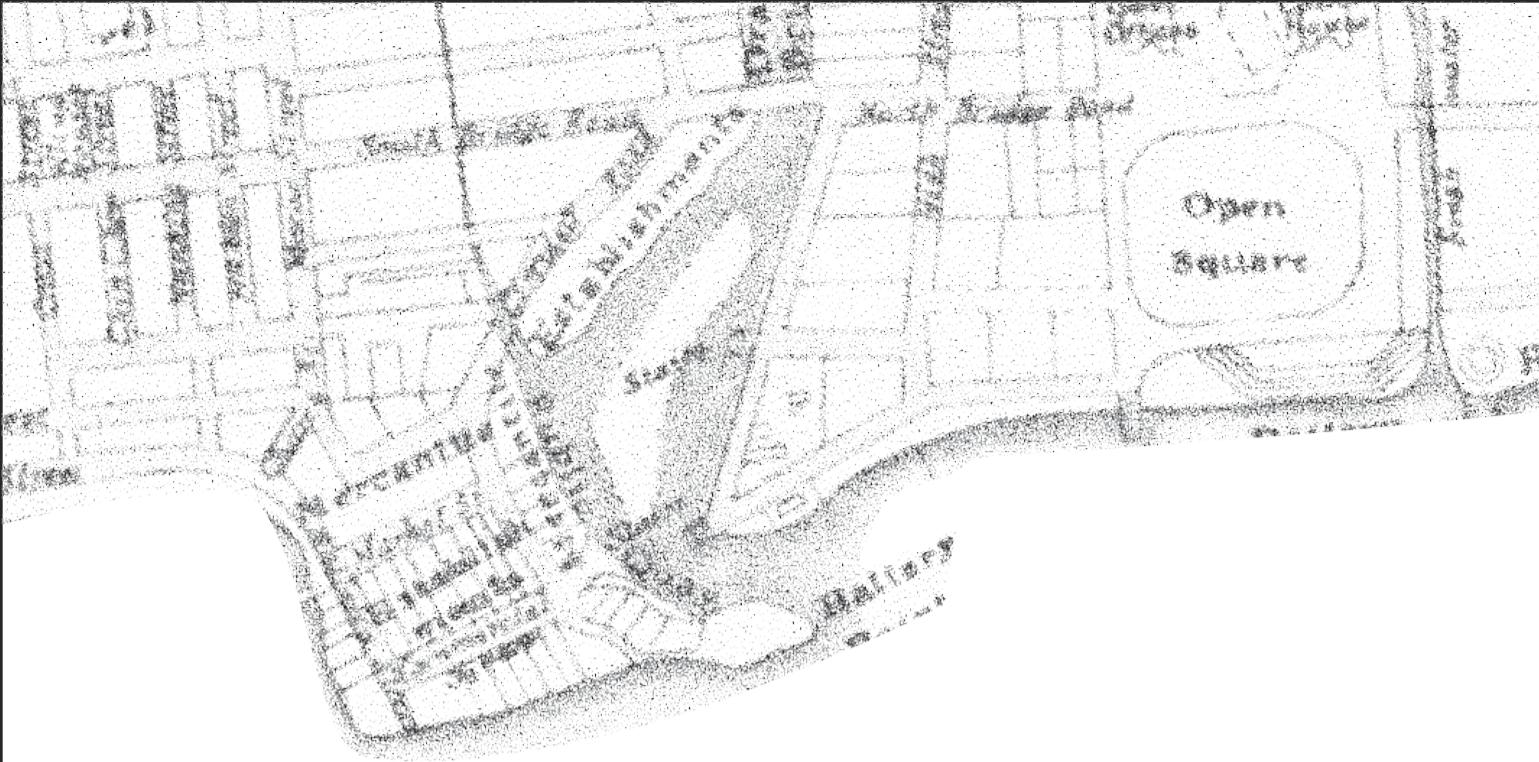
H. R. Hafford  
Agent to the Rock  
Island Telegraph and  
Telegraph Co.  
and Postmaster of Rock  
Island, John.





200<sup>th</sup>  
Anniversary  
of the establishment  
of the Port of Singapore  
in the Straits Settlement

80(ht) x 166(wt) mm



## 1 Raffles Town Plan 1824

The Raffles Town Plan was formulated in late 1822. The town plan focused on the downtown area, particularly around the Singapore River, and spanned from Telok Ayer to the Kallang River.

It was based on the vision that Singapore would be “a place of considerable magnitude and importance” and, as such, “an economical and proper allotment of the ground intended to form the site of the principal town [was] an object of first importance”.

The plan aimed to balance commercial, residential, and civic spaces, setting the stage for orderly urban development that would align with Singapore’s burgeoning status as a critical trading port in the region.

## 2 Ratification of 1819 Treaty

The ratification of the 1819 treaty secured British control over Singapore, formalizing its role as a key trading post. Signed by Sir Stamford Raffles, Sultan Hussein Shah, and the Temenggong, the treaty allowed Raffles to develop Singapore as a free port.

200

## SINGAPORE BICENTENNIAL 1819 - 2019

**th** Year of establishing  
Singapura as a trading port by Sir  
Stamford Raffles And Major General  
William Farquhar

### ③ Treaty of Singapore 1819

On 6 February 1819, Stamford Raffles, Temenggong Abdu'r Rahman and Sultan Hussein Shah of Johor signed a treaty that gave the British East India Company (EIC) the right to set up a trading post in Singapore.

On that same day, the British flag was officially hoisted in Singapore, symbolizing the beginning of British sovereignty and the establishment of Singapore as a British settlement. This act marked a new chapter in Singapore's history, transitioning from a modest port to a central node in the British Empire's trade network.

Raffles's

Landing

4

HMS Indiana with HMS Enterprise

5

Raffles's Boat

6

Fishing Village

4

5

6

HMS Indiana & HMS Enterprise docked at St. John's Island while Sir Stamford Raffles and Major General Farquhar went ashore to meet the Temenggong

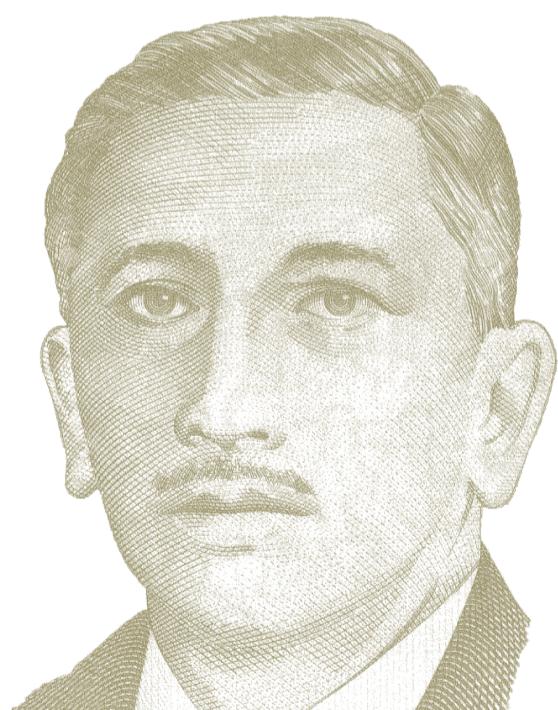
Stamford Raffles landed in Singapore on 28 January 1819. Travelling on the Indiana with a squadron that included the schooner Enterprise, he anchored at St John's Island at 4.00 pm on 28 January 1819 and met with Temenggong Abdul Rahman.

The 200 Singapore Dollar banknote coincides with the nation's anniversary of establishing Singapore as a major trading port to both South East Asia and the World.

This banknote not only marks Singapore's early transformation from a modest island settlement into a bustling hub of global commerce but also celebrates the foresight and vision that positioned it as a key player in international trade.

## Obverse

Yusof bin Ishak, 1st President of Republic of Singapore;  
Raffles Town Plan 1824



**Yusof Ishak**, Singapore's first President, is featured on Singapore's banknotes as a tribute to his significant contributions to the nation during its formative years.

Serving from 1965 to 1970, he symbolized unity, resilience, and leadership in the wake of Singapore's independence.

His presence on the currency honors his legacy in fostering a cohesive, multicultural society and guiding the nation through its early challenges.

**Chinese Seals**, symbolise the cultural influence of the Chinese, honoring multicultural heritage and unity in the diverse nation.



CHAIRMAN  
MONETARY AUTHORITY  
OF SINGAPORE

A



B

# SINGAPURA 新加坡 சிங்கப்பூர் SINGAPORE

Singapore banknotes feature four languages—English, Mandarin, Malay, and Tamil—to represent the nation's core ethnic communities and reinforce its commitment to inclusivity and multicultural harmony. This design choice acknowledges and respects the linguistic diversity of Singapore's population.

Additionally, the Merlion, an iconic symbol combining a lion's head and a fish's body, is featured to highlight Singapore's historical transformation from a humble fishing village to a thriving global city, embodying the spirit of resilience and progress. Together, these elements celebrate the nation's unity and rich cultural tapestry.

A - Print Accuracy Indicators in the form of [Merlion]  
 B - [Singapore] in 4 Languages, Malay, Mandarin, Tamil & English respectively.

## Reverse

Storyboard of how Singapura was established as a trading port during pre-colonial Singapore; 1819 Treaty of Singapore; Raffles's Landing

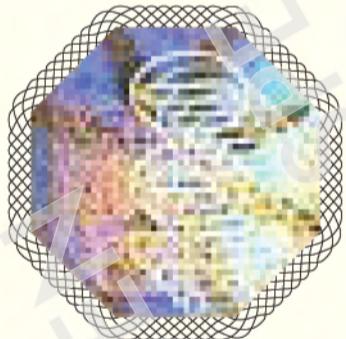


SINGAPURA 新加坡 சிங்கப்பாற் SINGAPORE



O A A 1 2 3 4 5 6

200



THIS NOTE IS LEGAL TENDER

TWO HUNDRED  
DOLLARS



CHAIRMAN  
MONETARY AUTHORITY  
OF SINGAPORE



SINGAPORE

O A A 1 2 3 4 5 6

200

Yusof bin Ishak



# SINGAPORE BICENTENNIAL 1819 - 2019

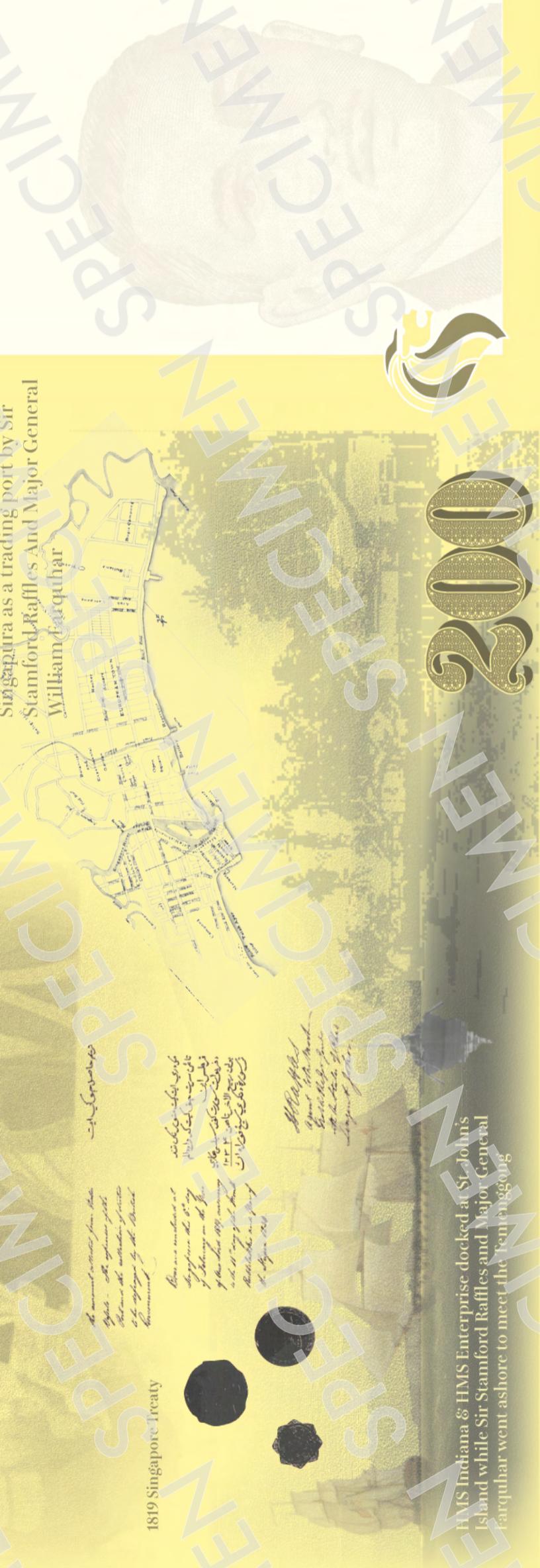
200  
200  
200

Year of establishing  
Singapore as a trading port by Sir  
Stamford Raffles And Major General  
William Farquhar

1819 Singapore Treaty  
The annexed is from the  
Treaty - the opinion given  
and the resolution given  
at Singapore at Date  
Commence

موده بخاتمه مکان داد  
تای سینگاپور بخاتمه مکان داد  
لندن پرنسپال سفیر مکان داد  
دیگر سفیر مکان داد  
لندن پرنسپال سفیر مکان داد  
لندن پرنسپال سفیر مکان داد

Mr Stamford  
Great Britain  
General  
William Farquhar  
Agent of  
the  
Company  
of  
India



200

HMS Indiana & HMS Enterprise docked at St. John's  
Island while Sir Stamford Raffles and Major General  
Farquhar went ashore to meet the Temenggong

# BA

# NK

## Thalassocracies in Southeast Asia

Banknotes tell of thalassocracies' might,  
Southeast Asia's trade routes in sight.

Security in Design

# Banknotes



# Designing the most circulated product desirable coveted

This series is a tribute to the rich maritime heritage of Southeast Asia, celebrating the thalassocracies that once dominated the region's history. Each note showcases intricate designs featuring ancient seafaring empires like Srivijaya and Majapahit, whose influence extended across vast trade routes connecting distant shores. The detailed illustrations depict majestic ships, bustling port cities, and cultural symbols that highlight the power and prosperity brought by these maritime states. The series reflects the deep historical significance of these empires in shaping regional commerce, culture, and diplomacy.



SERIES

# Thalassocracies of Southeast Asia



Southeast Asia's thalassocracies, such as Srivijaya, Majapahit, and the Sultanate of Malacca, were powerful maritime empires that shaped the region's history through control of strategic trade routes. These seafaring states thrived on commerce, facilitating cultural and economic exchanges that connected the Indian Ocean with the South China Sea. Their dominance over maritime trade not only brought prosperity but also created a shared heritage of interconnected societies, emphasizing mutual benefit and collaboration across vast waters.

A shared currency themed around these thalassocracies would symbolize the collective history and economic strength of Southeast Asia. Such a currency could feature imagery of traditional ships, ancient port cities, and maritime motifs to celebrate the unity and cooperative spirit that defined these empires.

This theme would not only foster regional pride and identity but also inspire modern economic and cultural partnerships, underscoring the idea that the region prospers through interconnectedness and shared heritage.

In addition, the theme depicts the evolution of Southeast Asian unity and its connection to the world through trade.

Famous figures and iconic buildings are intentionally excluded so as to not be biased to any member state yet associable among Southeast Asians and also to ensure equal representation in the design as a common currency.



Subtle watermarks and holographic elements are incorporated seamlessly, complementing traditional motifs and emblems, when combined, serves as both a functional currency and an educational piece.



- 5** Ancient maritime empires.
- 10** Later era of ancient maritime empire.
- 50** Colonial period in Southeast Asia.
- 100** Formation of ASEAN and its role in regional trade among member states.
- 200** ASEAN's role within international trade due to its strategic location within the world's major shipping lanes.

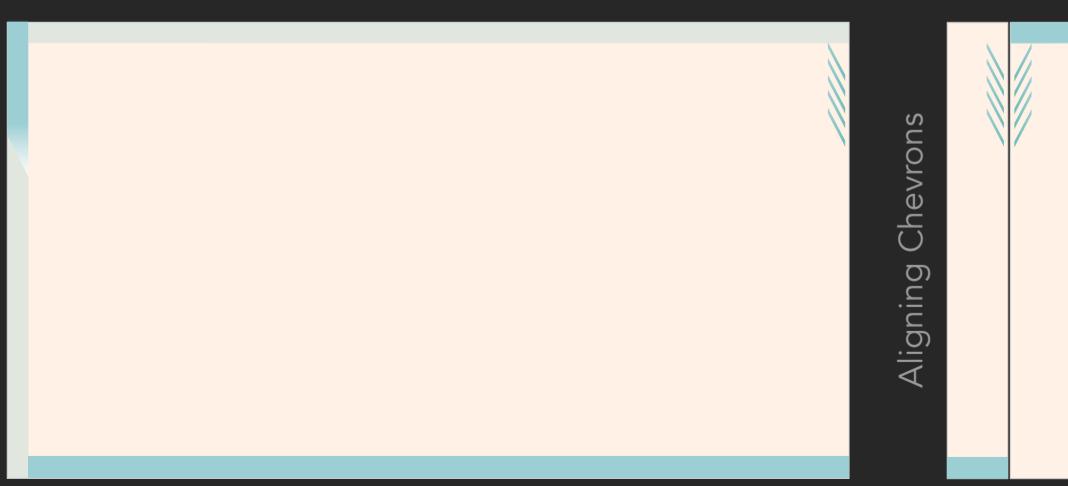


## Obverse

The hypothetical currency series features a dynamic map of Southeast Asia, capturing the shifting territories and boundaries of the region's thalassocracies across different historical eras. Each denomination showcases a unique time period, depicting how power and influence moved throughout the centuries.

- 1 Ultraviolet ASEAN Logo
- 2 Guilloched Denomination
- 3 ASEAN Languages
- 4 Ultraviolet ASEAN Territories
- 5 Port Cities; Omron rings
- 6 ASEAN Metallic Stripe
- 7 Braille Alphabet
- 8 Serial Number

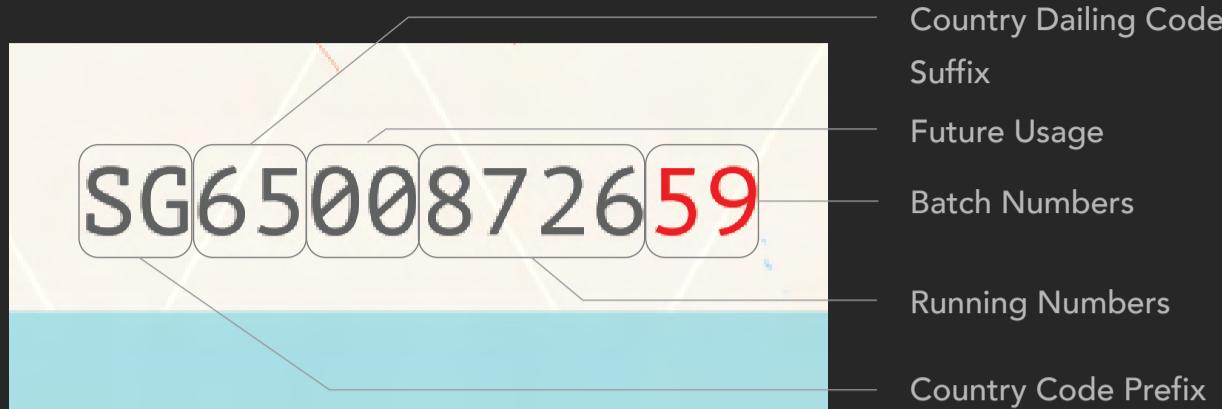
## Print Accuracy Indicators<sup>2</sup>



Seamless Constituting Boundary

Aligning Chevrons

# Serial Numbering<sup>1</sup>



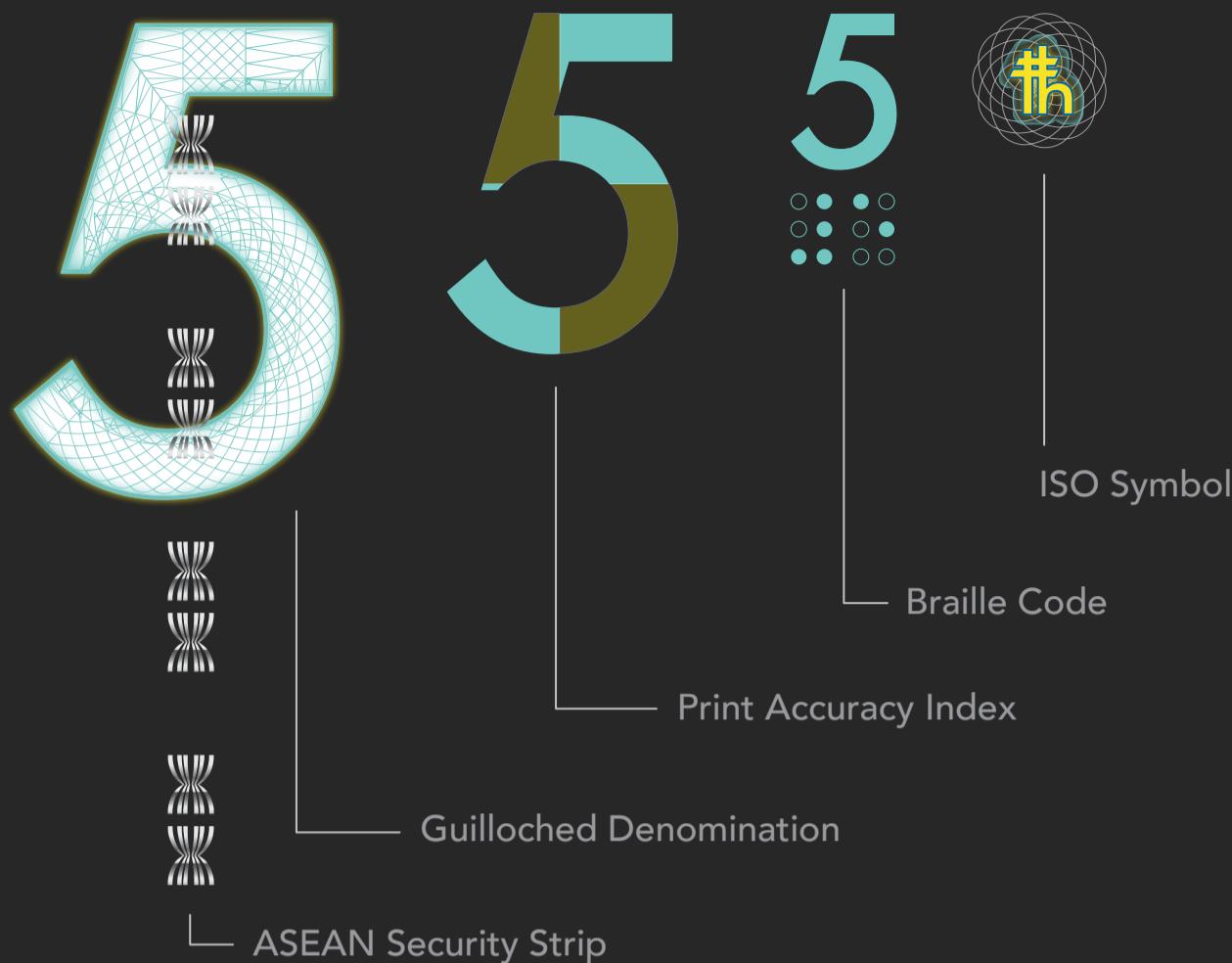
## Reverse

Presents a modern map of Southeast Asia, with economic nodes forming the centerpiece of a security patch, symbolising interconnected trade that drives regional growth. This intricate security patch not only serves as an anti-counterfeiting measure but also reinforces the theme of regional unity and collaboration.

Highlighting ASEAN's pivotal role, its name is inscribed in the national language of each member state, emphasizing unity and inclusivity. Subtle shades depicting milestone events reflect key historical eras, showcasing the region's journey toward economic strength and integration.

- 1 Southeast Asia Milestone
- 2 ASEAN Logo
- 3 Guilloched Denomination
- 4 Metallic Denomination
- 5 ASEAN Languages
- 6 Currency Symbol





## Asian Development Bank

Bank Pangembangan Asian

Bank Pembangunan Asian

Asyano Pagbuo ng Bangko

Ngân hàng phát triển châu Á

ବନାକାରୀ ଯେତ୍ରାବିଧାନ ପରିଷଦୀ

ଆଶିଯା ଅପିଲିରାତ୍ମନୀ ବନ୍ଦକୀ

ଦିନାଜାର୍ଯ୍ୟକାରୀ ଆଶିଯା ବନ୍ଦକୀ

ଆଶିଯା ଏକାଡେମୀଯୁନିଟ୍

ଥିମ୍ବାରୀମାନିଫଟରୀମାନିଫଟରୀ

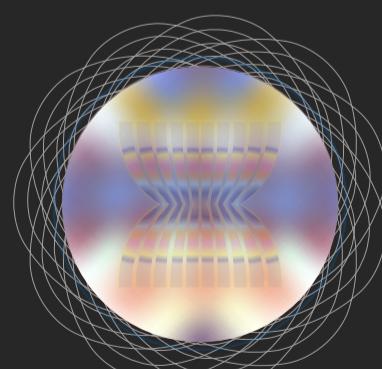
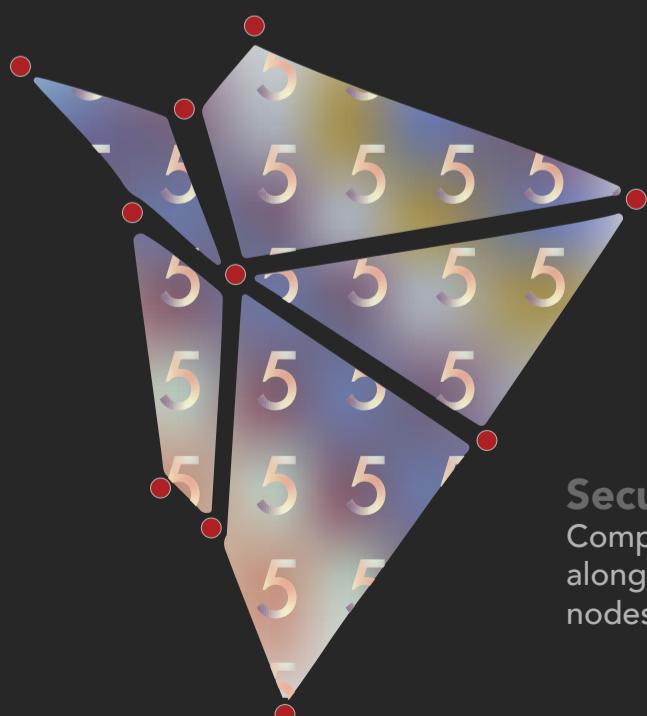
亚洲开发银行



2019 Antonio Sanolo  
President  
Asian Development Bank

## ASEAN's Asian Development Bank

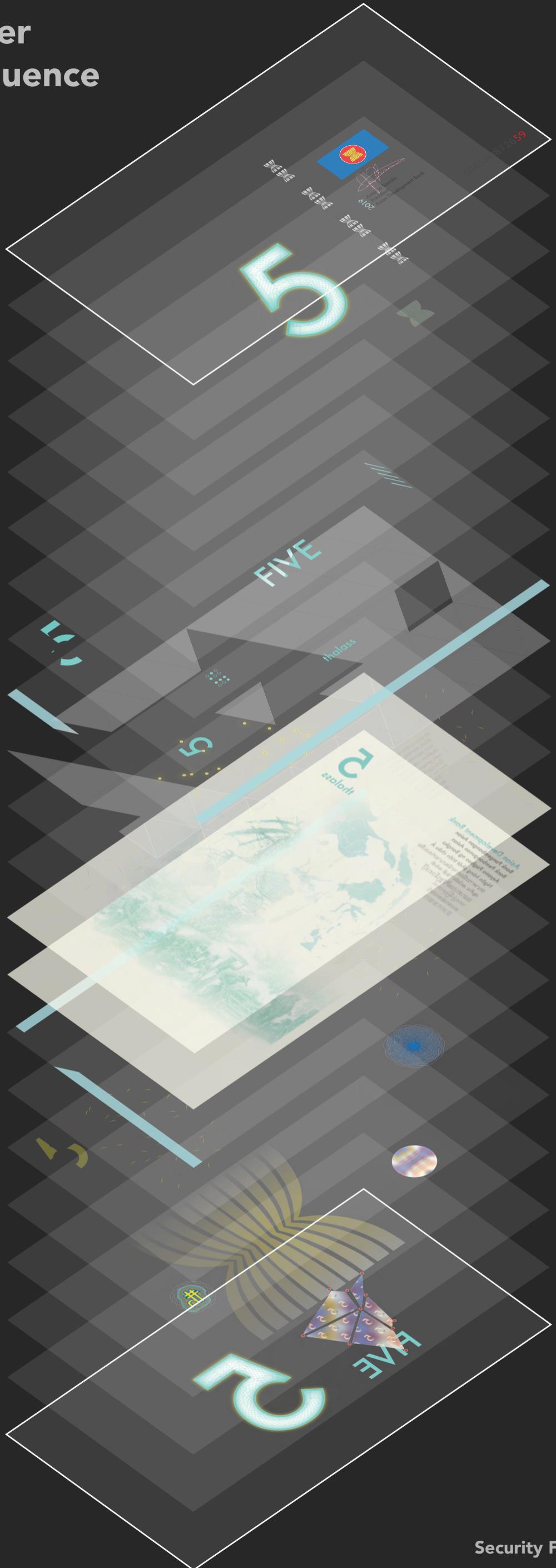
Comprises of ASEAN's organisation flag, along with an array of translation of the bank's names in the national language of each member state



## Security Patch

Comprises of ASEAN's organisation emblem, along with a mapped port cities as economic nodes form the centerpiece of the security patch.

# Layer Sequence



Security Features

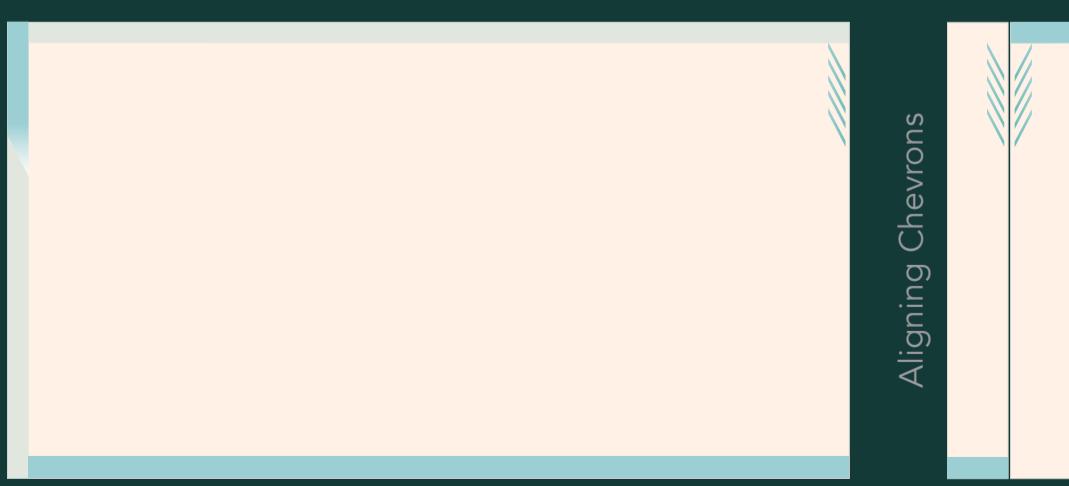


## Obverse

The hypothetical currency series features a dynamic map of Southeast Asia, capturing the shifting territories and boundaries of the region's thalassocracies across different historical eras. Each denomination showcases a unique time period, depicting how power and influence moved throughout the centuries.

- 1 Serial Number
- 2 Ultraviolet ASEAN Logo
- 3 Guilloched Denomination
- 4 Ultraviolet ASEAN Logo
- 5 Ultraviolet ASEAN Territories
- 6 Major Port Cities as Omron rings
- 7 Transparent Ultraviolet Denomination
- 8 Transparent Guilloched Symbol
- 9 Braille Alphabet

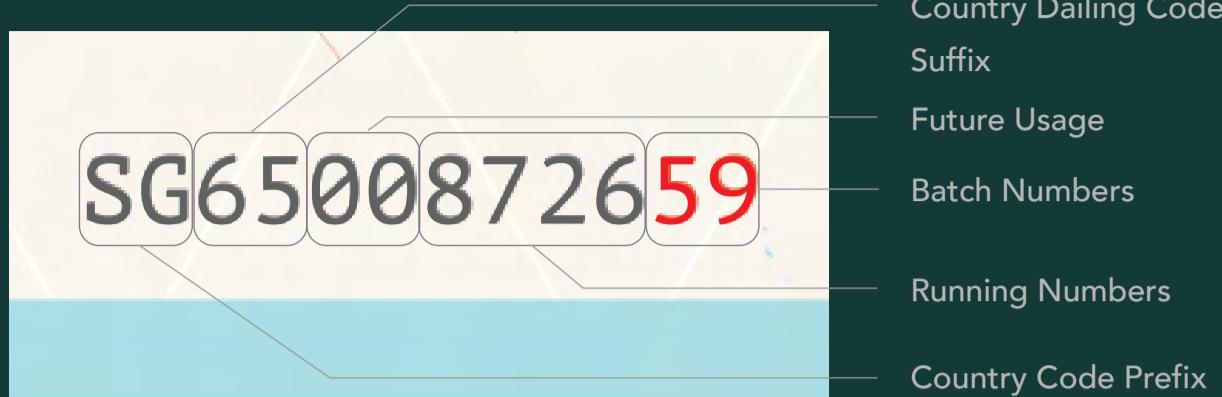
## Print Accuracy Indicators<sup>2</sup> Polymer



Seamless Constituting Boundary

Aligning Chevrons

# Serial Numbering<sup>1</sup> Polymer



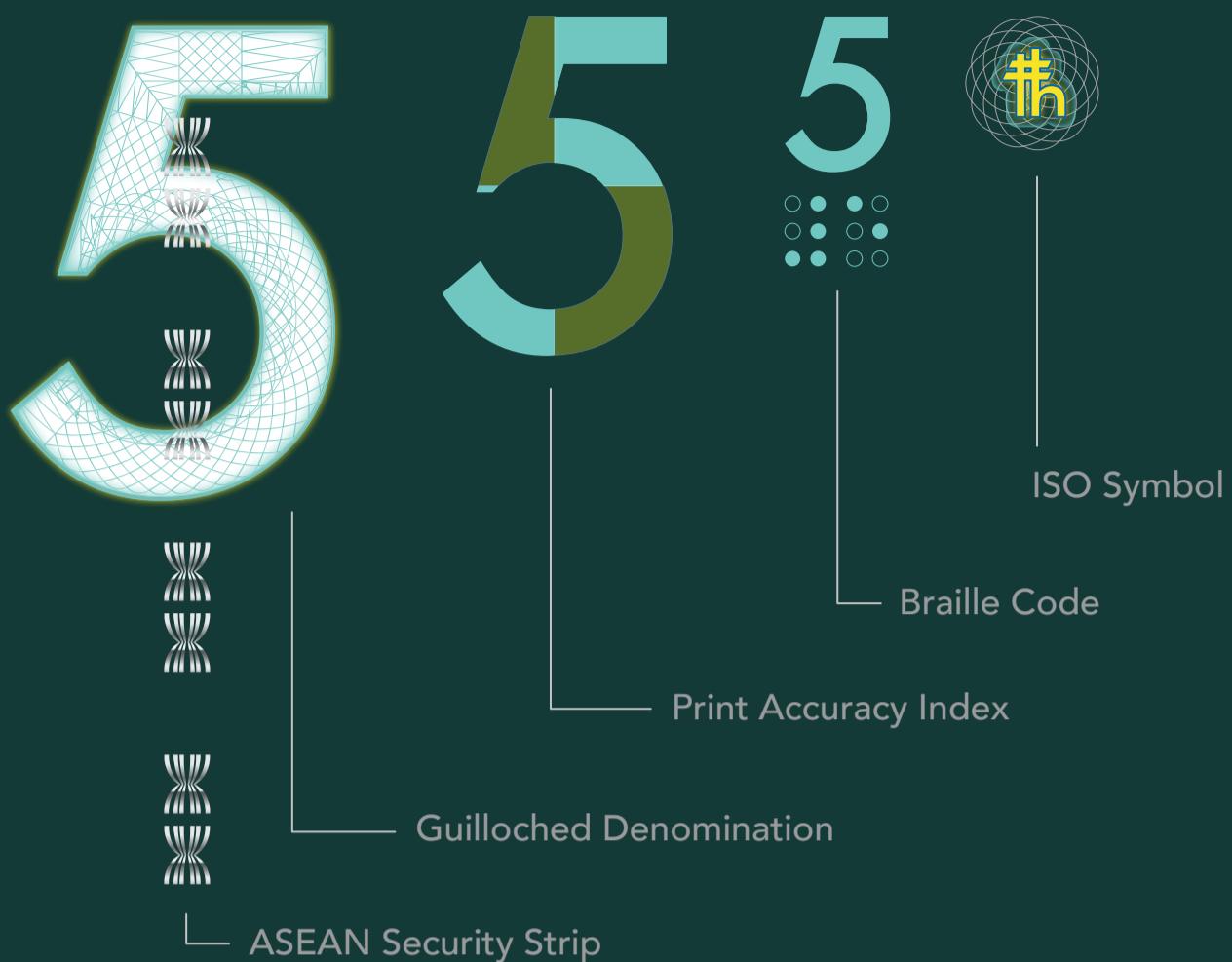
## Reverse

Presents a modern map of Southeast Asia, with economic nodes forming the centerpiece of a security patch, symbolising interconnected trade that drives regional growth. This intricate security patch not only serves as an anti-counterfeiting measure but also reinforces the theme of regional unity and collaboration.

Highlighting ASEAN's pivotal role, its name is inscribed in the national language of each member state, emphasizing unity and inclusivity. Subtle shades depicting milestone events reflect key historical eras, showcasing the region's journey toward economic strength and integration.

- 1 Southeast Asia Milestone
- 2 ASEAN Logo
- 3 Guilloched Denomination
- 4 Transparent Denomination
- 5 ASEAN Languages
- 6 Currency Symbol





## Asian Development Bank

Bank Pangembangan Asian

Bank Pembangunan Asian

Asyano Pagbuo ng Bangko

Ngân hàng phát triển châu Á

ବନାକାରୀ ଯେତ୍ରାପାଦିତ ଏକାଜୀବିତ

ଆଶ୍ରମ ଅଧିକାରୀଙ୍କ ବନ୍ଦି

ଜନାନ୍ୟାନାନ୍ତିର୍ମିଳିତ ବନ୍ଦି

ଆବୃତ୍ତିର୍ମିଳିତ ବନ୍ଦି

ଥିମାରିମିଫିଲିମାରି

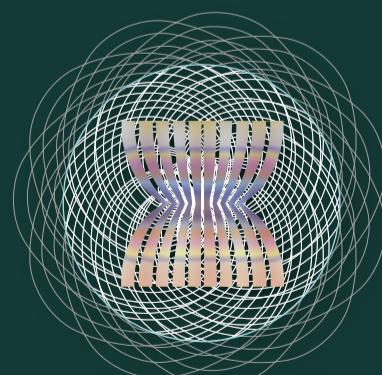
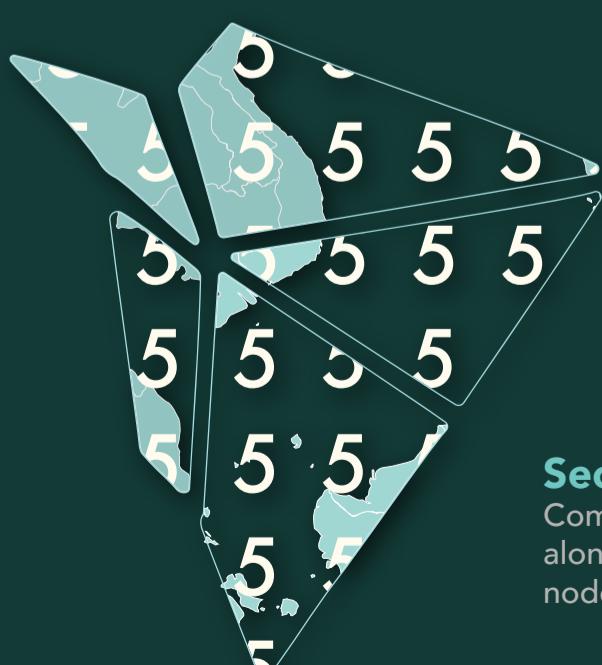
亚洲开发银行



Antonio Sanolo  
President  
2019 Asian Development Bank

## ASEAN's Asian Development Bank

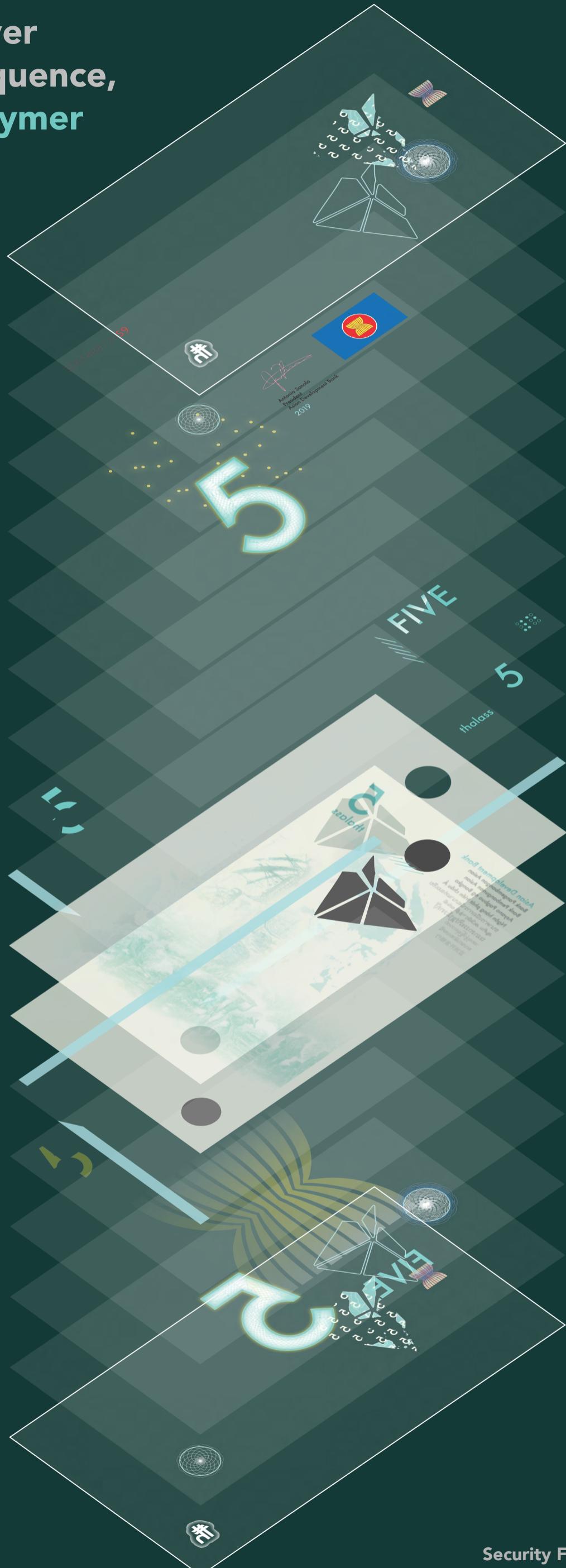
Comprises of ASEAN's organisation flag, along with an array of translation of the bank's names in the national language of each member state



### Security Patch

Comprises of ASEAN's organisation emblem, along with a mapped port cities as economic nodes form the centerpiece of the security patch.

# Layer Sequence, Polymer



Security Features





**Reverse**  
120mm x 65mm

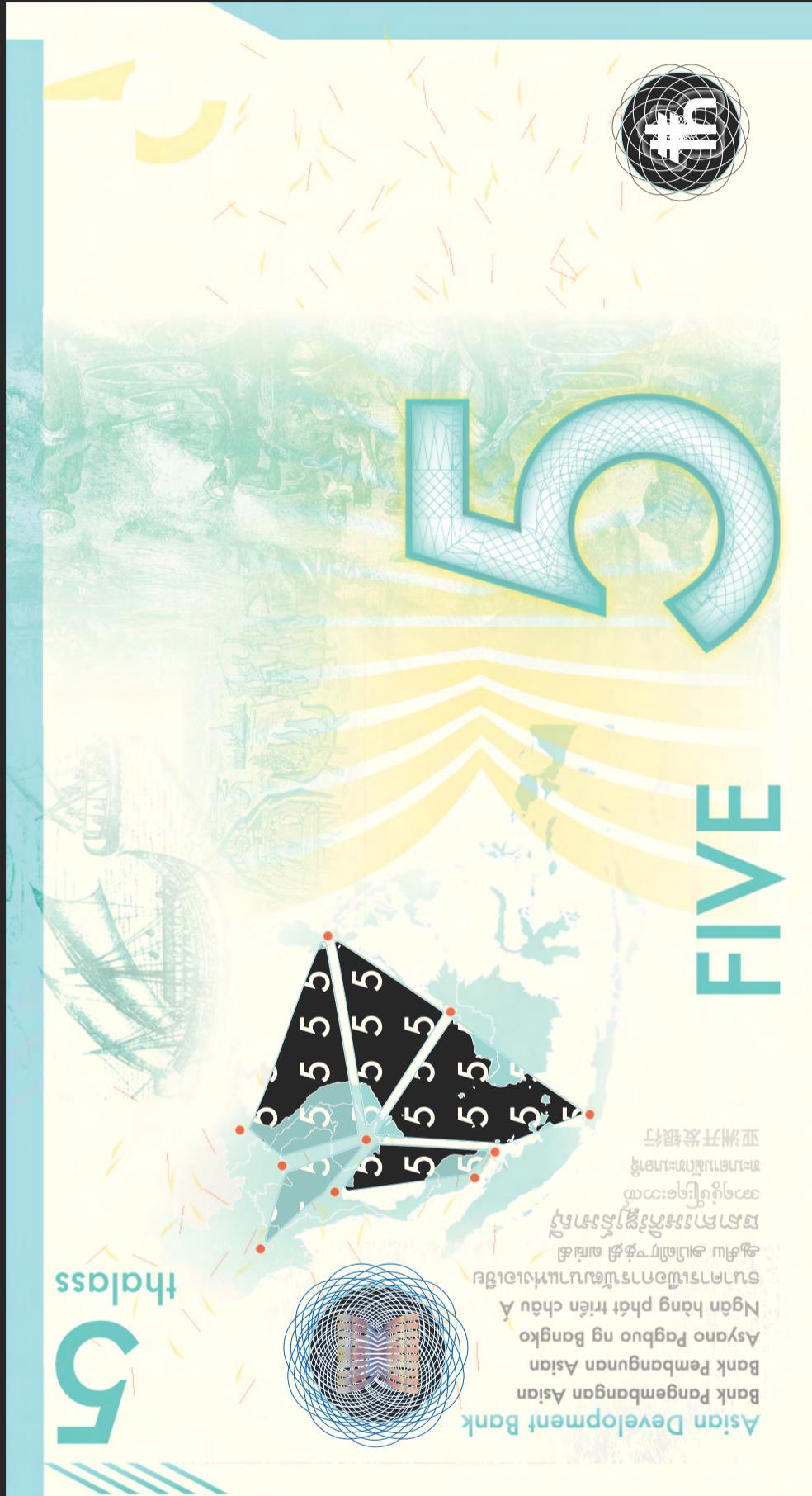
Ancient Maritime Transport, Trading Posts c.1300



### Obverse

120mm x 65mm, Polymer

Ancient Empires, Ancient Major Ports c.1300



**Reverse**

120mm x 65mm, Polymer

Ancient Maritime Transport, Trading Posts c.1300



**Obverse**  
130mm x 70mm

Ancient Empires, Ancient Major Ports c.1500



**Reverse**

130mm x 70mm

Ancient Maritime Transport, Trading Posts c.1500



## Obverse

130mm x 70mm, Polymer

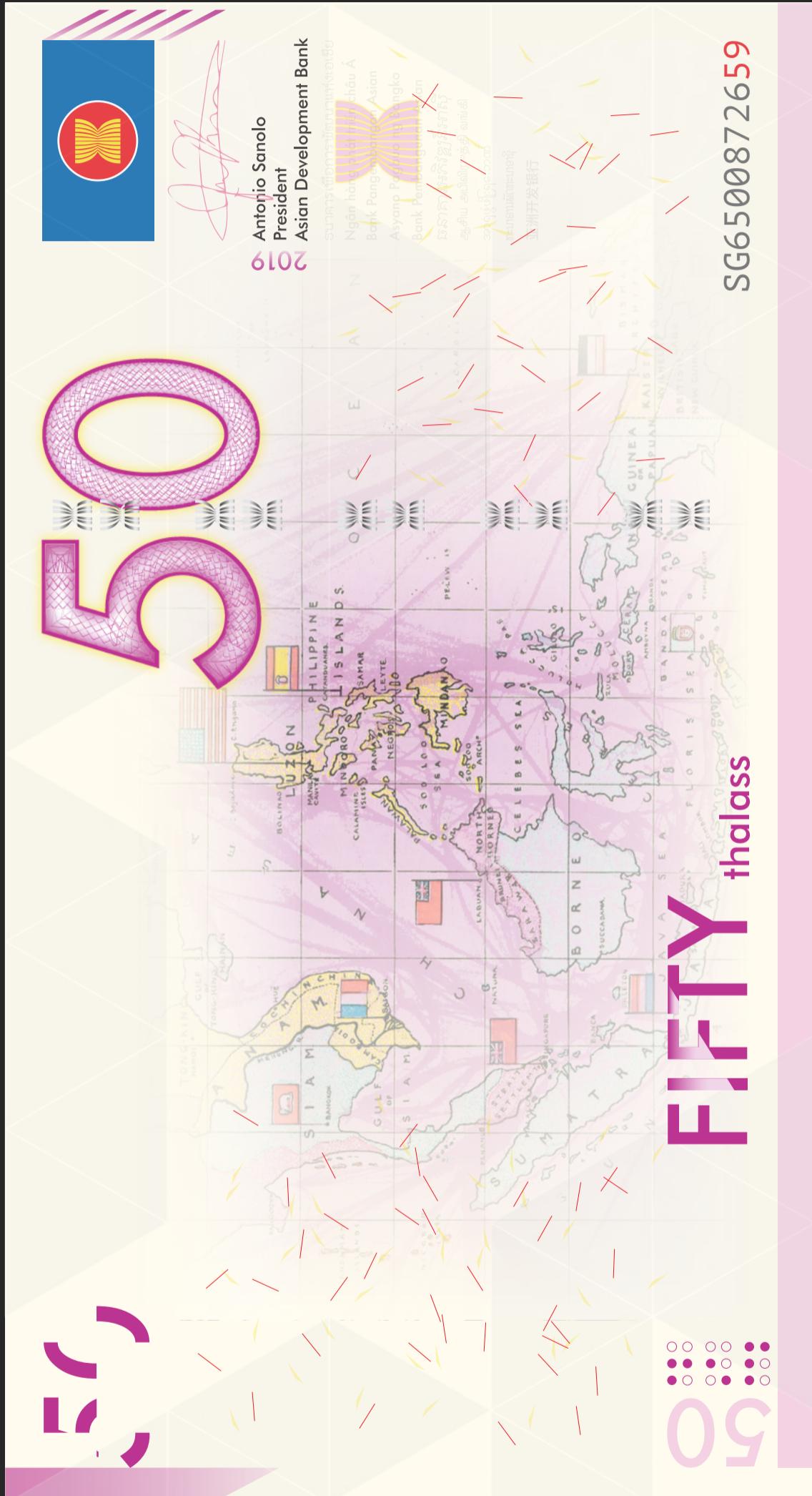
Ancient Empires, Ancient Major Ports c.1500



**Reverse**

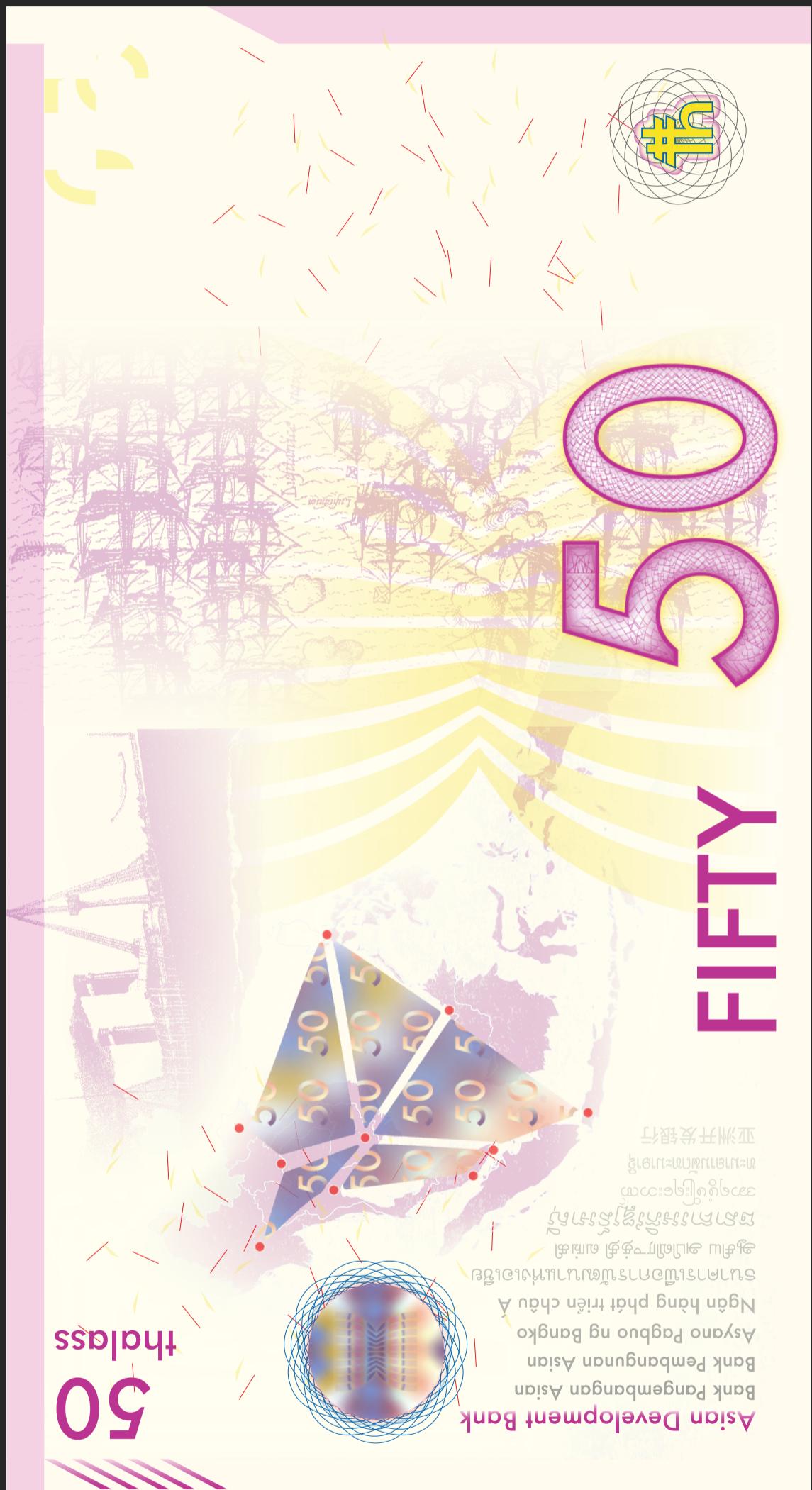
130mm x 70mm, **Polymer**

Ancient Maritime Transport, Trading Posts c.1500



**Obverse**  
140mm x 75mm

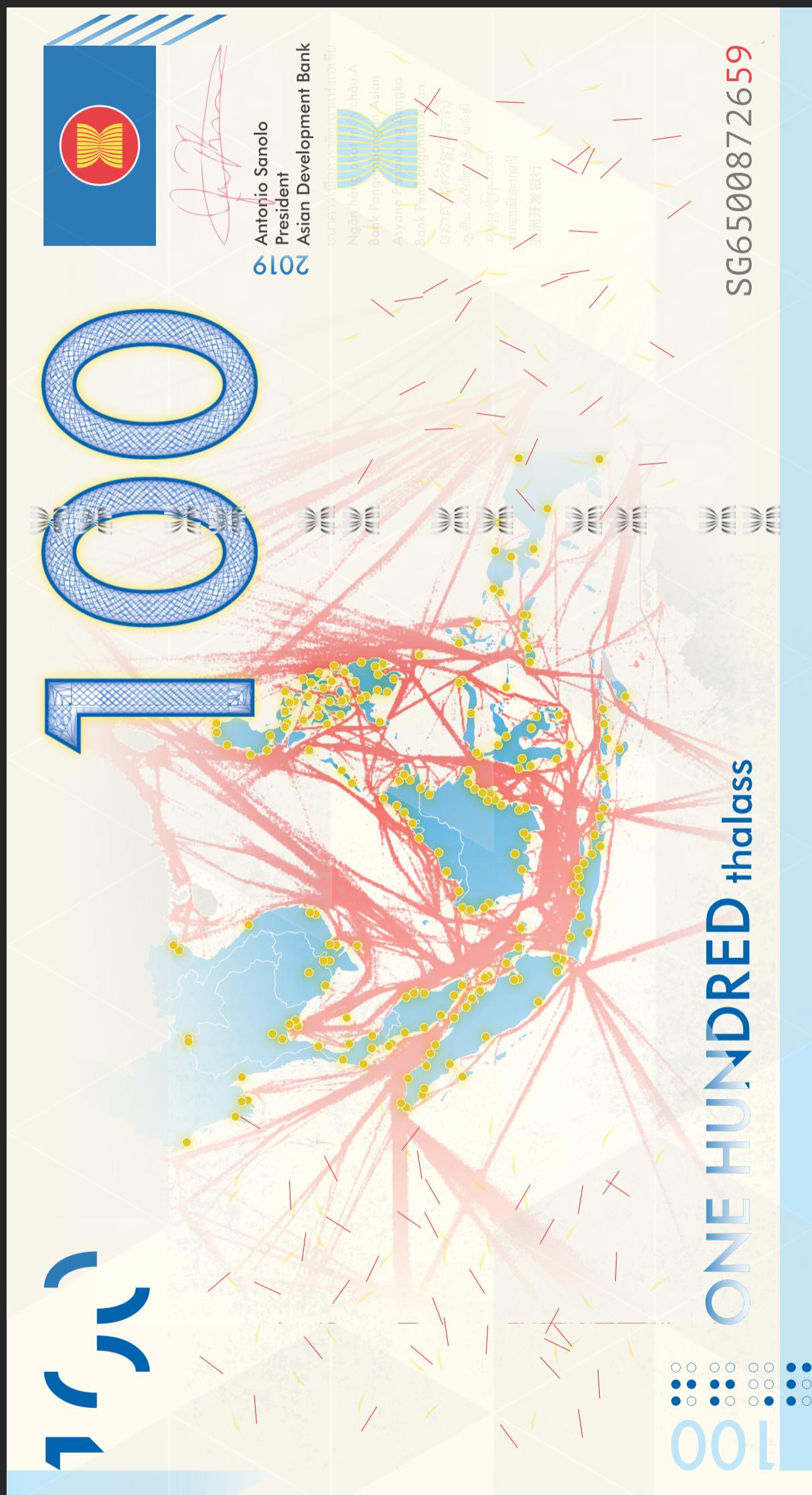
Colonisation



## Reverse

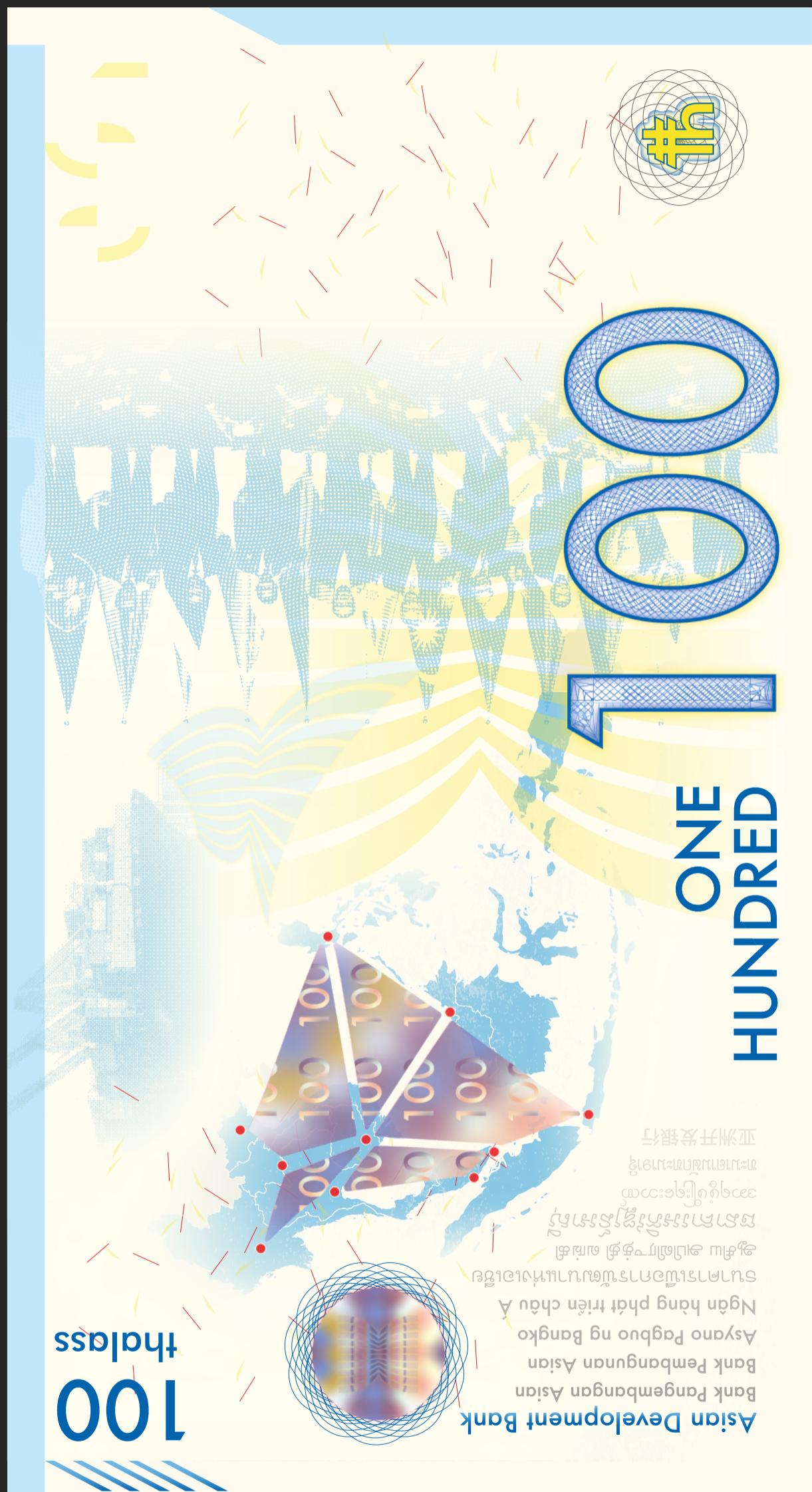
**Reverse**  
140mm x 75mm

## Colonial Trade Influence



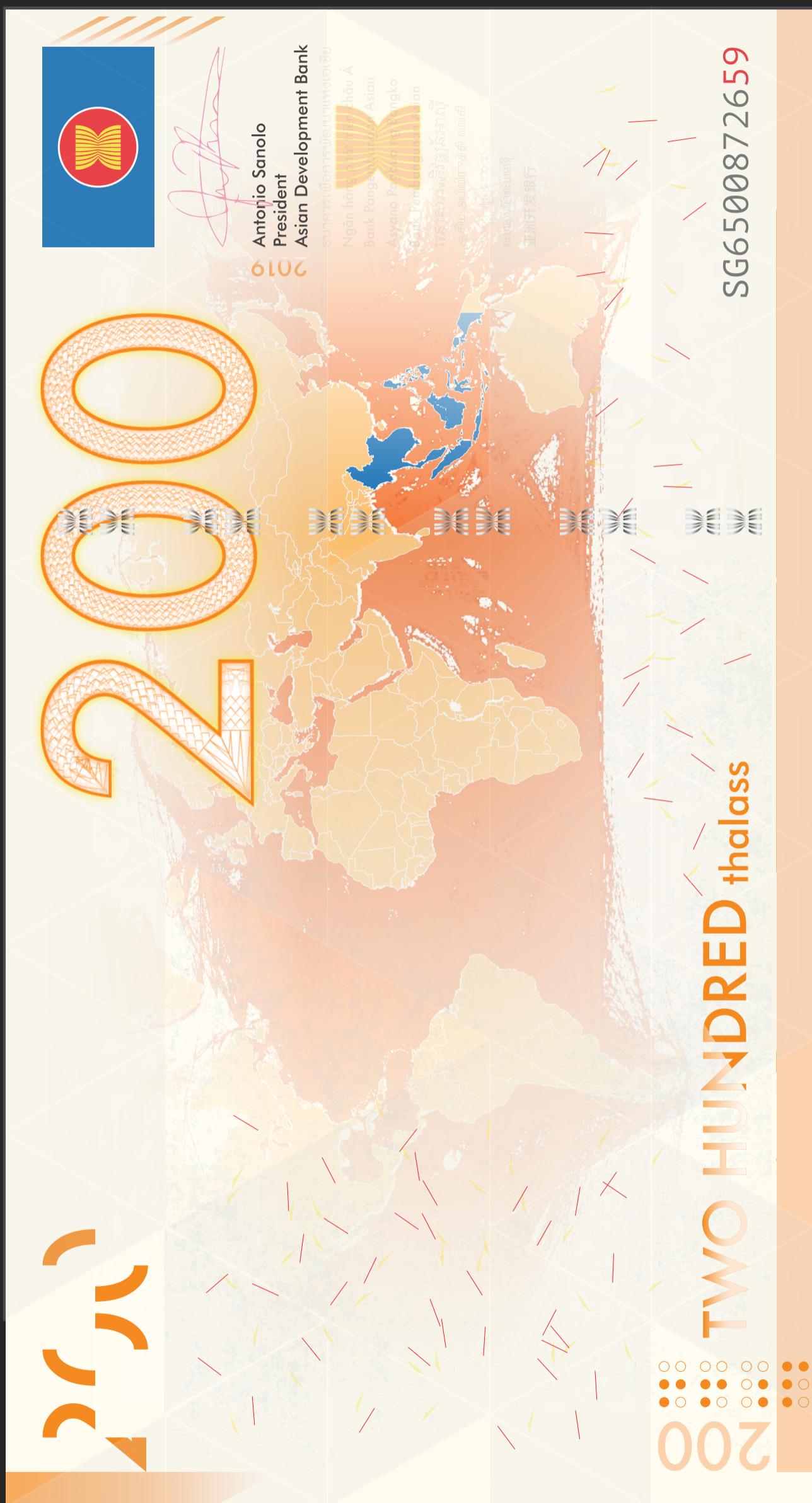
**Obverse**  
150mm x 80mm

Major Ports, Trade Routes within ASEAN FTA



**Reverse**  
150mm x 80mm

ASEAN - Capitals, FTA



**Obverse**  
160mm x 85mm

World Trade Routes - ASEAN's Integration to World Economy



**Reverse**

160mm x 85mm

ASEAN - Capitals, Stocks Market Trading

S P

A T

**Isuzu. D-Max.**

An Isuzu show, bold and grand,  
Proves its cars conquer every land.

I A L

**ISUZU**

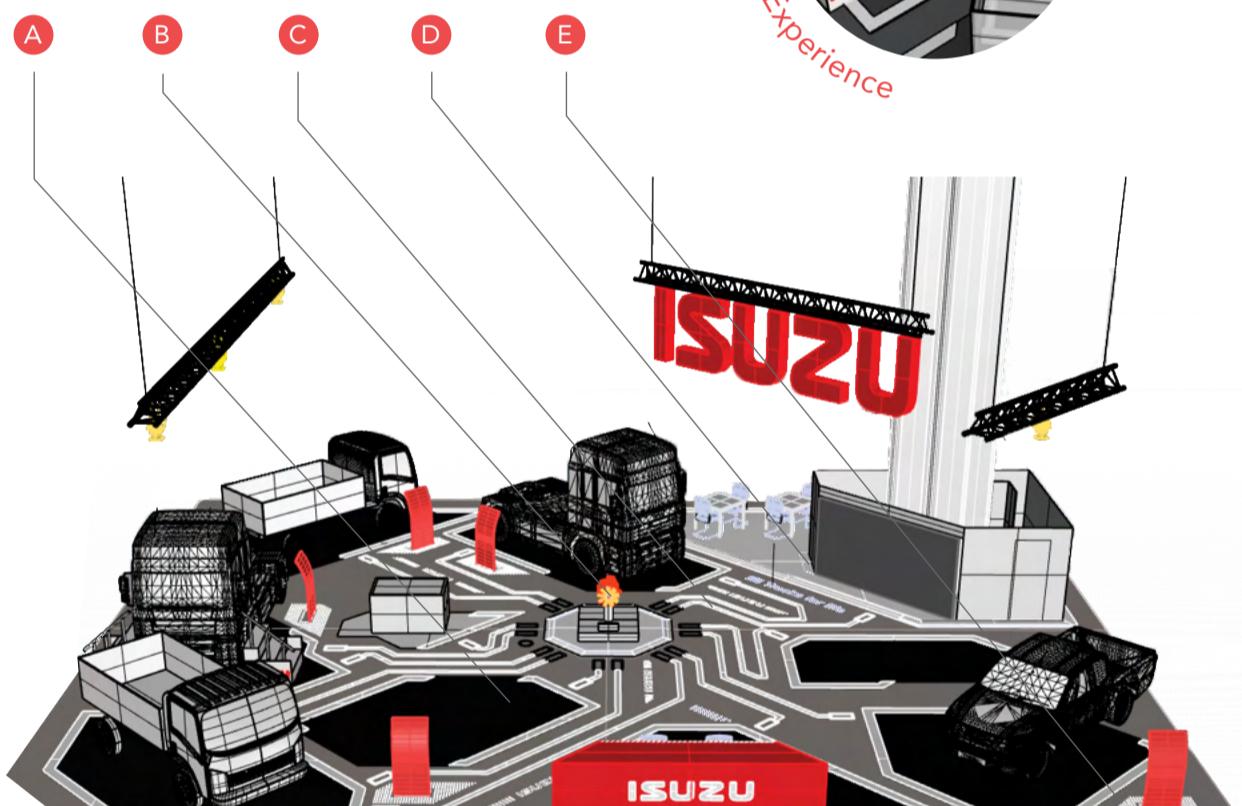
SINGAPORE  
**MOTOR  
SHOW**  
2 0 2 0

The Singapore Motorshow is the premier automotive event showcasing the latest vehicle models, innovative technologies, and interactive experiences.

It brings together car enthusiasts, industry leaders, and the public to celebrate automotive excellence and advancements.



# Colour, Material, Finishing

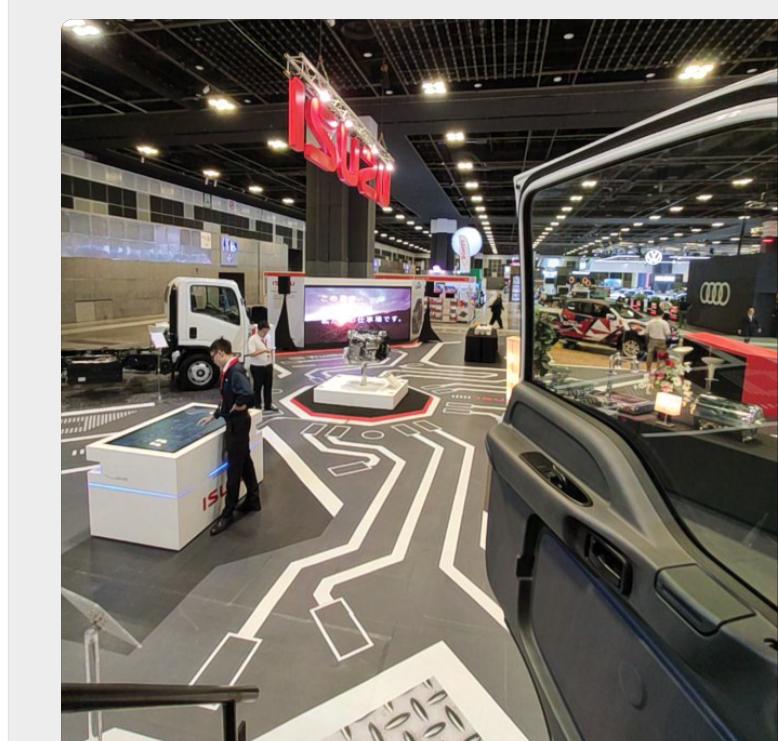


4000 sqft

Layout is built resembling a circuit board, figuratively implying the centrally located engine as the product line's beating heart. Vehicles are parked on various printed textures, signifying Isuzu's trucks ruggedness and its ability to handle most types of difficult terrains.

- A Space for Sponsors
- B Engine Exhibit
- C Branding Trail

- D Partition Wall
- E Spec Stand Perforation



SINGAPORE  
MOTORSHOW

20

# S P A T I A L

**Arconati. Living within a Gallery.**

A villa reborn, once in decay,  
Now an art gallery, drawing crowds each day.

New Ways of Living

# Living Without Doors



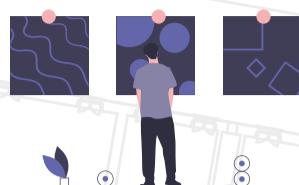
Apartment  
**#24**

Double  
Floor





Living in a Tree



Living in a Gallery



Gallery as Client Engagement

The project involves transforming a dilapidated villa into a vibrant art gallery, breathing new life into the historic structure and making it a cultural centerpiece. This revitalization aims to preserve the architectural integrity of the villa while reimagining its spaces to showcase contemporary and traditional artworks.

The gallery will feature rotating exhibitions, workshops, and events, creating a dynamic environment that attracts visitors and fosters local engagement. By integrating modern amenities and artistic elements, the project seeks to make the villa not only a destination for art lovers but also an appealing place to live.



Salone del Mobile. Milano

Featured In

# **Auditor by Day, Artist by Night**



**Front**

A typical day for an artist residing on the second floor might begin with an early morning routine of coffee and quiet reflection on her private terrace, overlooking the villa's historic grounds.

# **Exhibit at the Bottom, Live at the Top**



**Right**

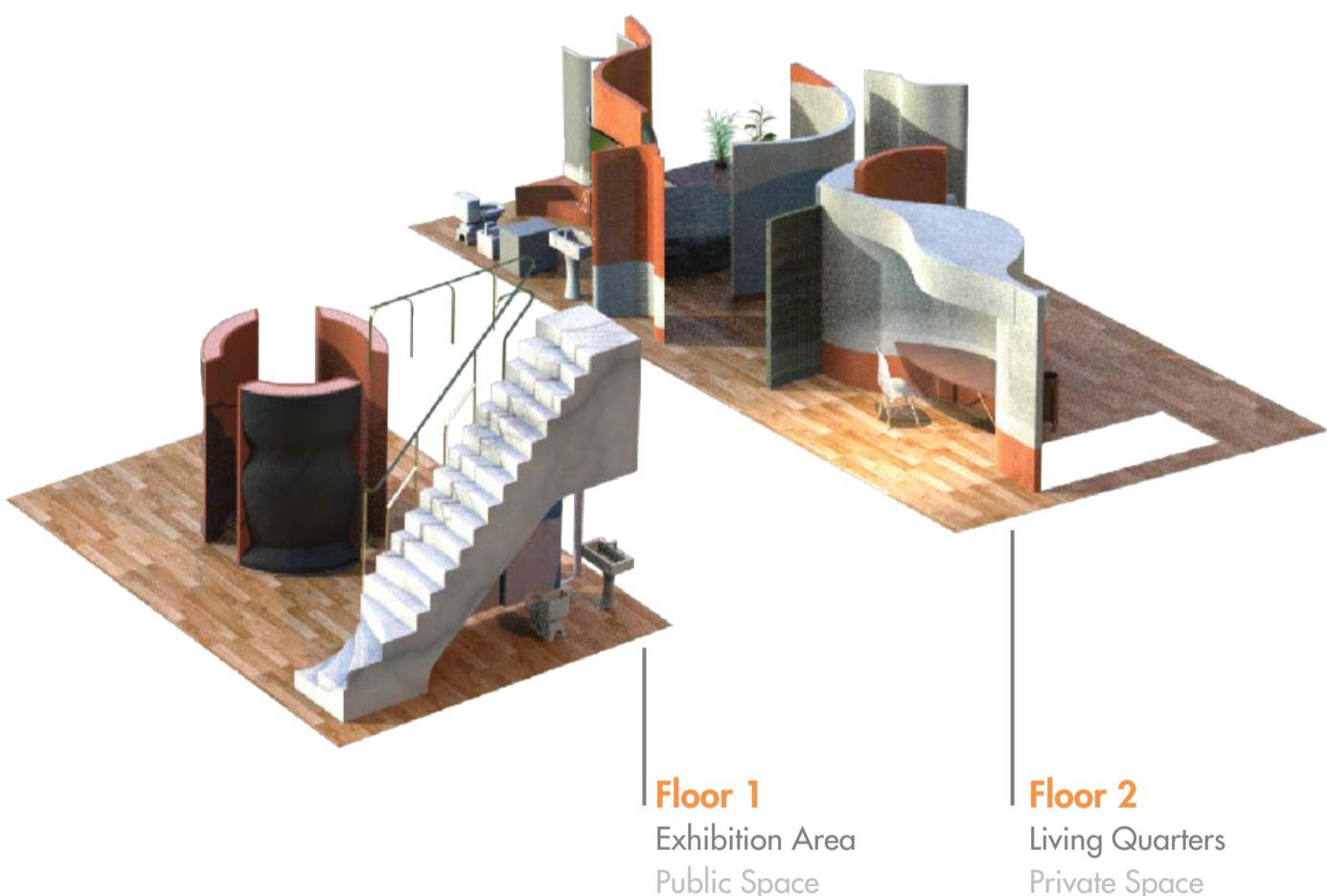
The second floor, designed as a private living space, offers a peaceful retreat with an open studio for working on new pieces in a space filled with natural light streaming through large, vintage

# Mid Morning Transitions to Exhibitions

As the gallery on the first floor opens to the public, the artist moves downstairs, where she greets visitors and provides insights into her work and current exhibitions.

Throughout the day, she might conduct workshops in an adjoining room, teaching painting techniques or creative concepts to eager participants.

Afternoon hours may be dedicated to guided tours, allowing her to share stories behind her art, fostering connections with patrons and enthusiasts.



In the early evening, the gallery may host an event such as a small artist talk or a cultural showcase. This allows her to live and breathe her art while connecting her life to her work, where her home becomes a living gallery that blurs the lines between personal space and public creativity.

The result is a lifestyle that harmonizes private artistry with community engagement, enriching both her own experience and the cultural fabric of the villa's visitors.



Integrating Life with Nature



Artistic Expressions



Inspiration through Entertainment



Culinary Experiments

## Floor 2 Top View

First Look Upon  
Entering Private Space



Web Browsing At Night



As the event winds down, she returns to her second-floor sanctuary, where she unwinds and reflects on the day's interactions, often sketching out new ideas inspired by conversations with visitors.

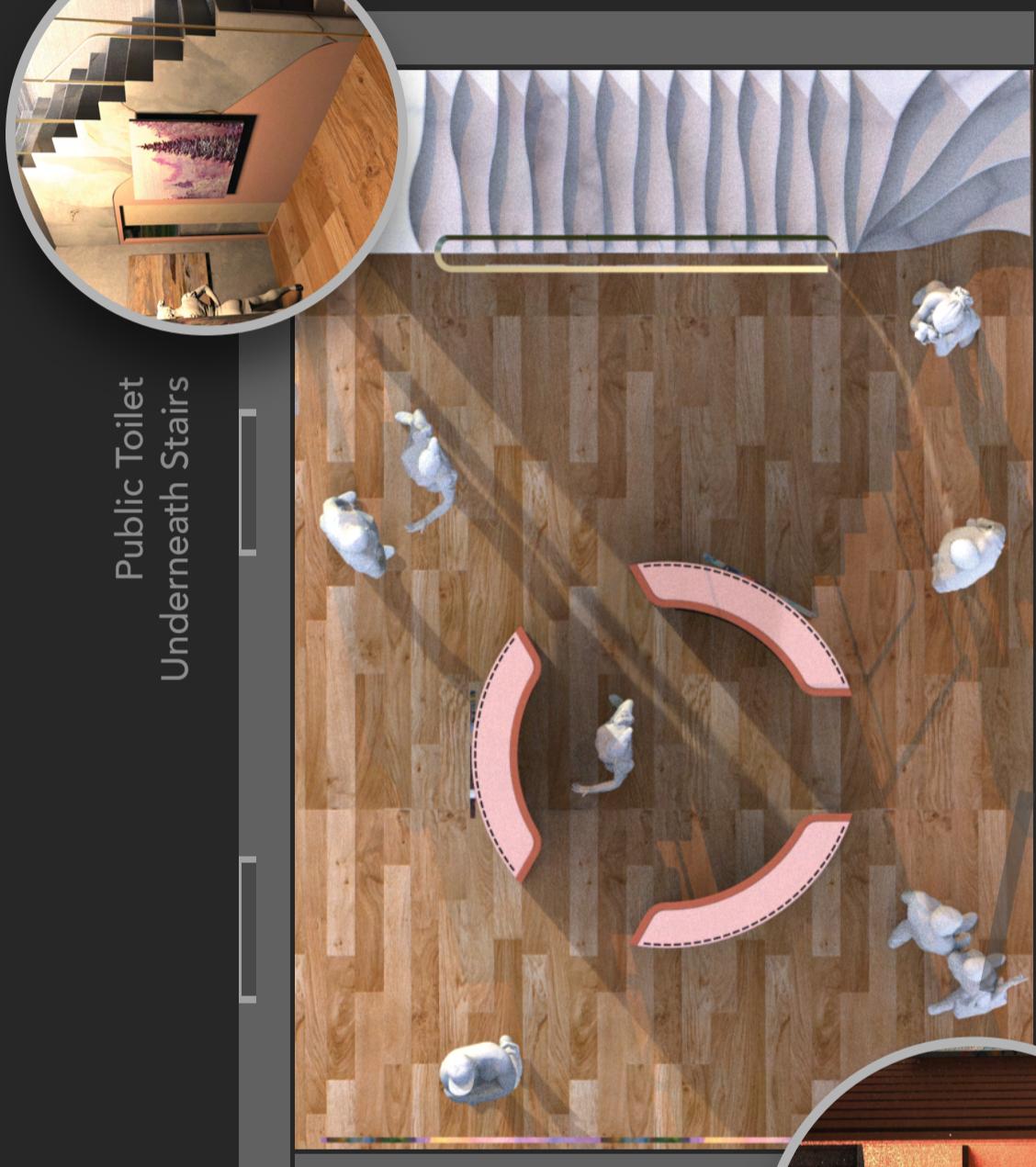
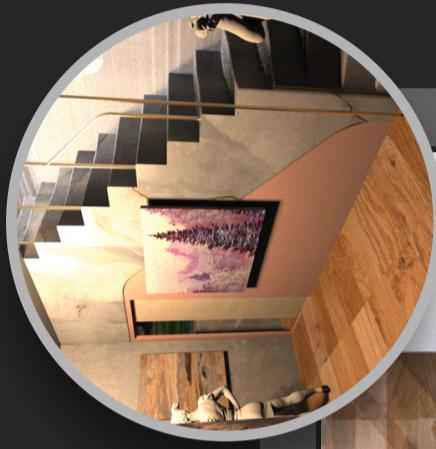
## Floor 1 Top View

Public Toilet  
Underneath Stairs

Driveway

Entrance-Facing  
Bar & Reception

The artist's involvement could include moderating discussions or engaging with attendees to build community ties. As the event winds down, she returns to her second-floor sanctuary, where she unwinds and reflects on the day's interactions, often sketching out new ideas inspired by conversations with visitors.



D A

T A

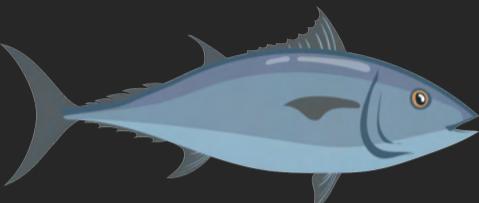
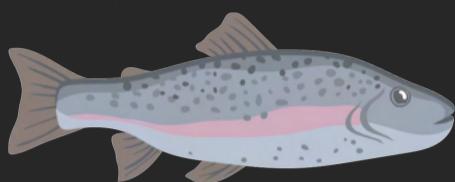
## **Sea of Life**

A chart with fish at each depth,  
Shows life where the ocean takes breath.

V I

# NATIONAL MUSEUM of NATURAL HISTORY

Smithsonian



## <Depth>

As a key focus  
As a defining categorising term

## <Goal>

Enlarge capabilities current database  
Reach out to more audiences

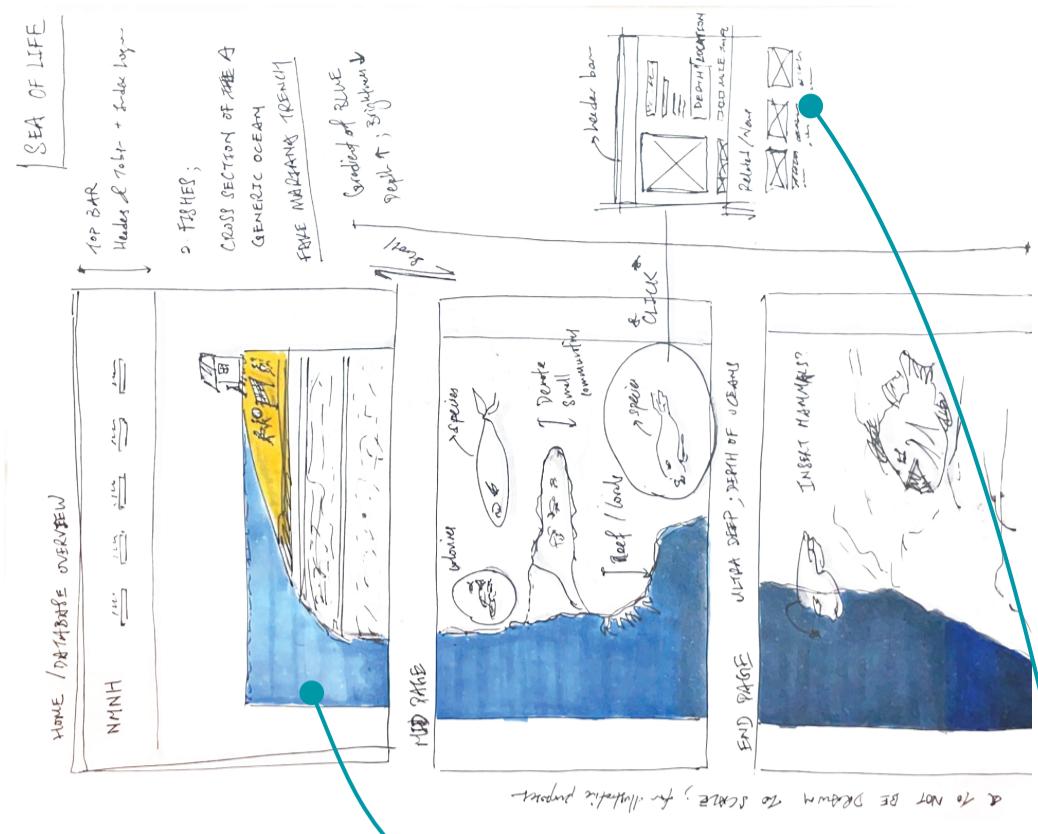
The Smithsonian fish collection is one of the world's largest, with over 6 million specimens. This extensive collection serves as a crucial resource for scientific research and conservation efforts.



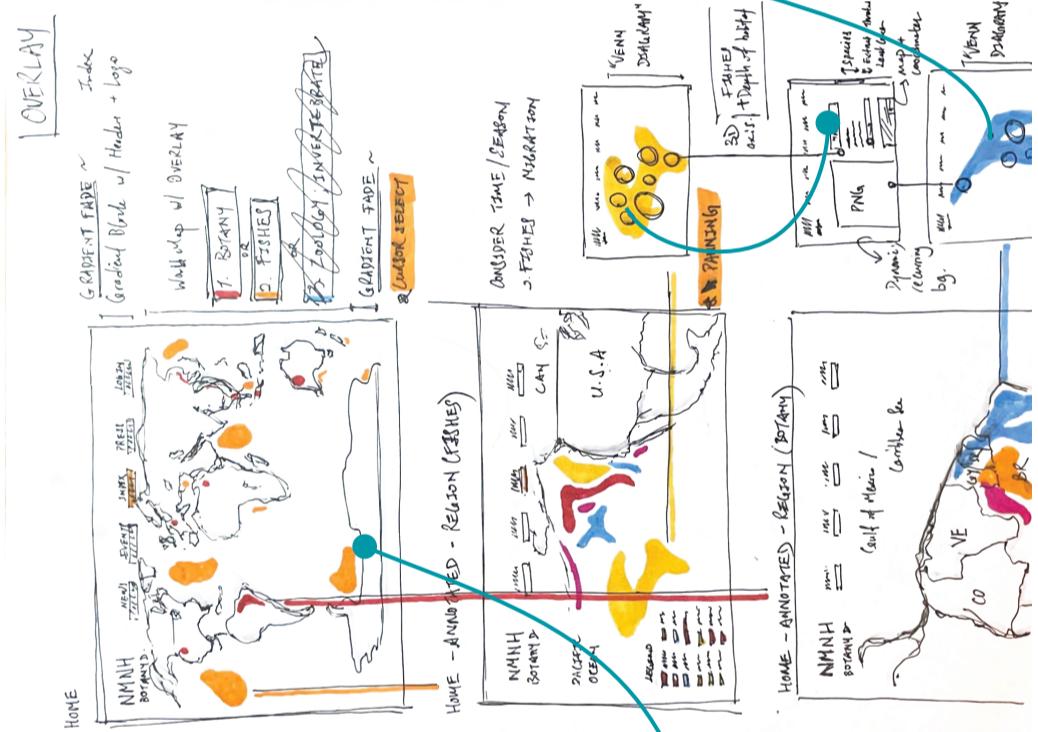
In this project, we dive into crafting a visualisation that uses depth as its main theme of illustrating the diversity of our oceans.

By using the depth data gathered from each fish, we move beyond simple categorization and enhance the storytelling potential of the information. The aim is to provide readers with an intuitive glimpse into the ecosystems of the deep, where various species coexist and thrive within overlapping environmental niches.

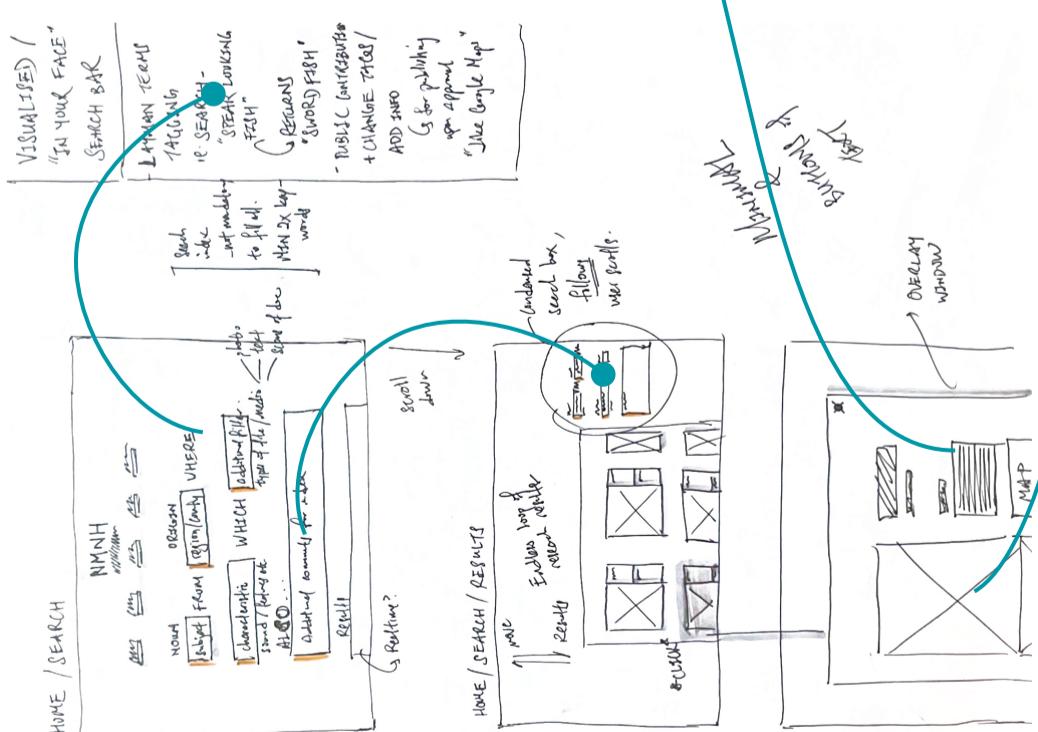
Through this approach, it deepens the audience's understanding of how biodiversity unfolds across different oceanic depths.



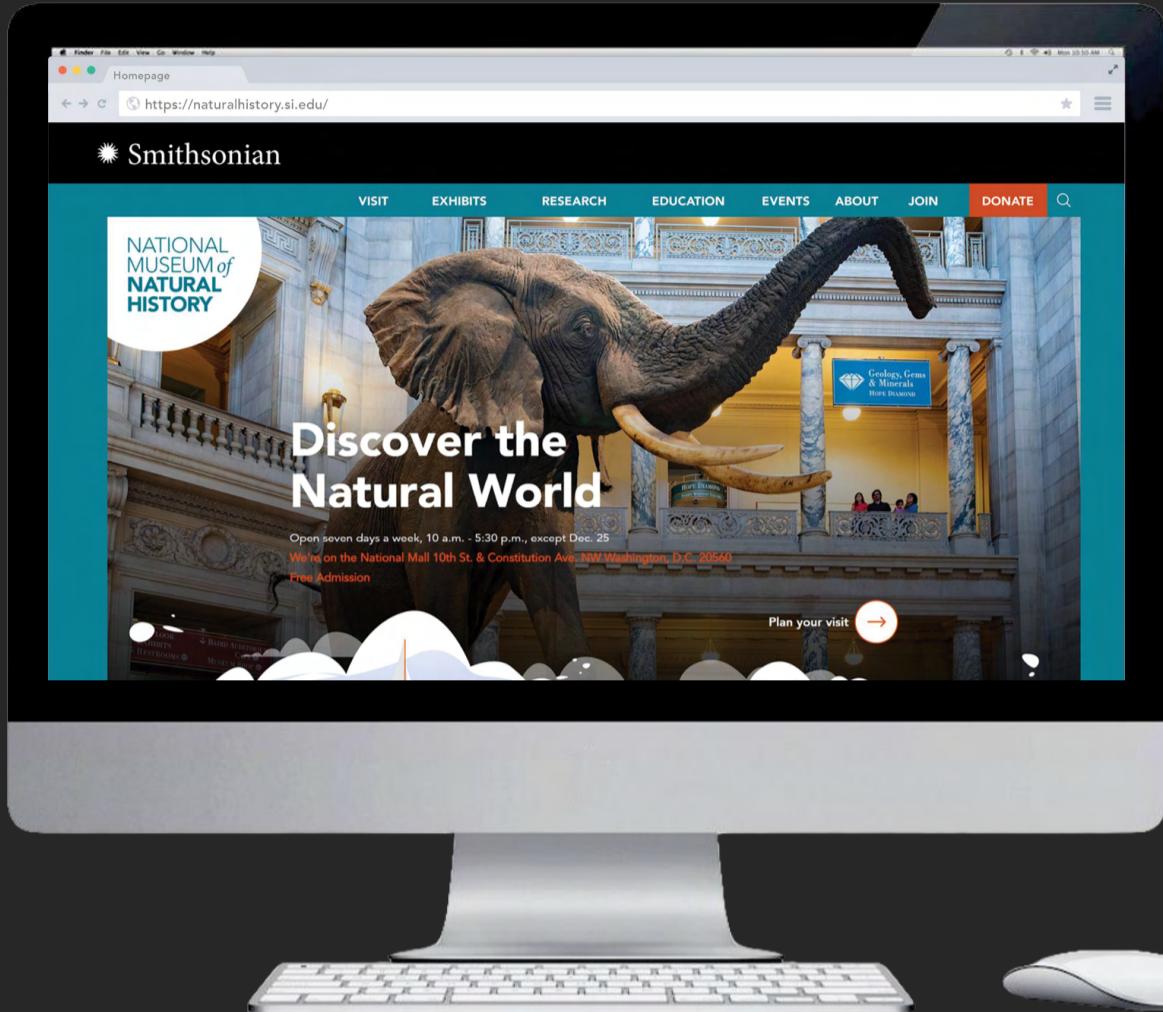
a to NOT BE DRAWN to scale; for illustrative purposes



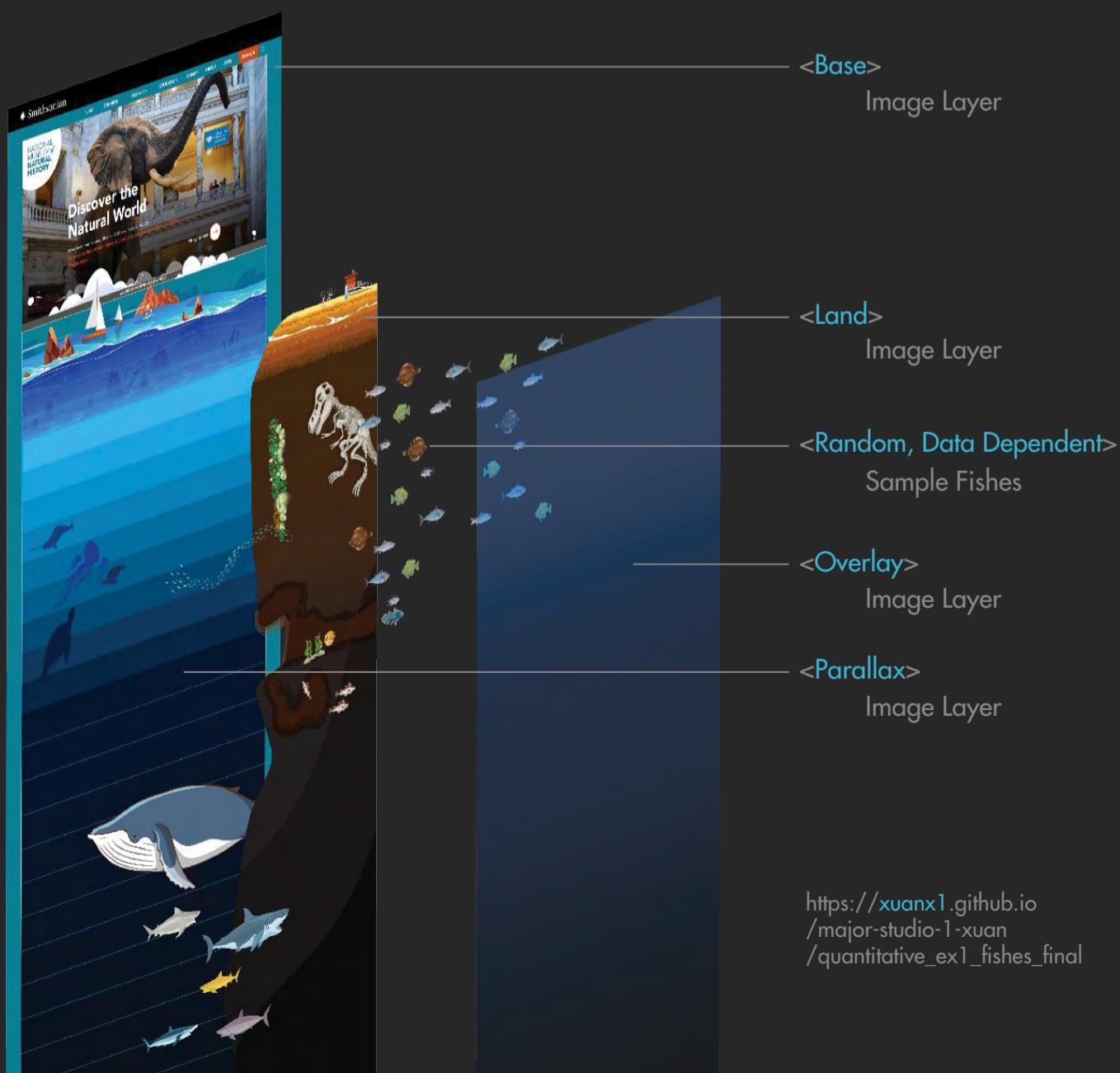
Evolution of Categorising UI >



<Base> Smithsonian  
<Overlay> Tabs  
<Random, Data Dependent>



Using the existing Smithsonian branding language ensures consistency, making adaptation and future expansion seamless. This approach enhances recognition and streamlines integration across new projects and initiatives.



Homepage  
https://naturalhistory.si.edu/

Smithsonian

NATIONAL MUSEUM of NATURAL HISTORY

VISIT EXHIBITS RESEARCH EDUCATION EVENTS ABOUT JOIN DONATE

**Discover the Natural World**

Open seven days a week, 10 a.m. - 5:30 p.m., except Dec. 25  
We're on the National Mall 10th St. & Constitution Ave. NW Washington, D.C. 20560  
Free admission

Plan your visit

WE ARE OPEN SEVEN DAYS A WEEK

During this time when educational resources are more important than ever, we are expanding our digital content and programming to provide them to you. Please help support our efforts to keep curious minds engaged and educated about the wonders of the natural world.

DONATE

Follow Us

NATIONAL MUSEUM of NATURAL HISTORY

Type your email to get NMNH updates SIGN UP

SMITHSONIAN INSTITUTION TERMS OF USE PRIVACY POLICY HOST AN EVENT JOBS PRESS BLOG CONTACT US

## <Cross Section>

<Land>

<img" style" src="link">

## <Sunlight Zone>

<Reef Fish>

```
// Load depth-data.json
// Filter depths 0-100m
// Sort Ascending
// Set image at depth interval
// Randomize colour, image size
// Limit to 50 images
// Populate at reefs
// Limit before deep sea
```

## <Twilight Zone>

<Marine Cave Fish>

<Whales>

```
// img id="" class=""
// Style css
// Link to Github attachment
// Set open link upon click
// Open link in new tab
// Add parallax for whale
// Scroll = window.pageYOffset
// Get element by id
// Adjust multiplier values
```

## <Bioluminescence Zone>

<Sharks>

<img" style" src="link">

<Deep Sea Species>

<Squid>

```
// img id="" class=""
// Style css
// Link to Github attachment
// Set open link upon click
// Open link in new tab
// Add parallax for whale
// Scroll = window.pageYOffset
// Get element by id
// Adjust multiplier values
```

<Octopus>

<img" style" src="link">

<Sharks>

<img" style" src="link">

<Fish>

<img" style" src="link">

## <Footer> Smithsonian

# DATA

# DATA

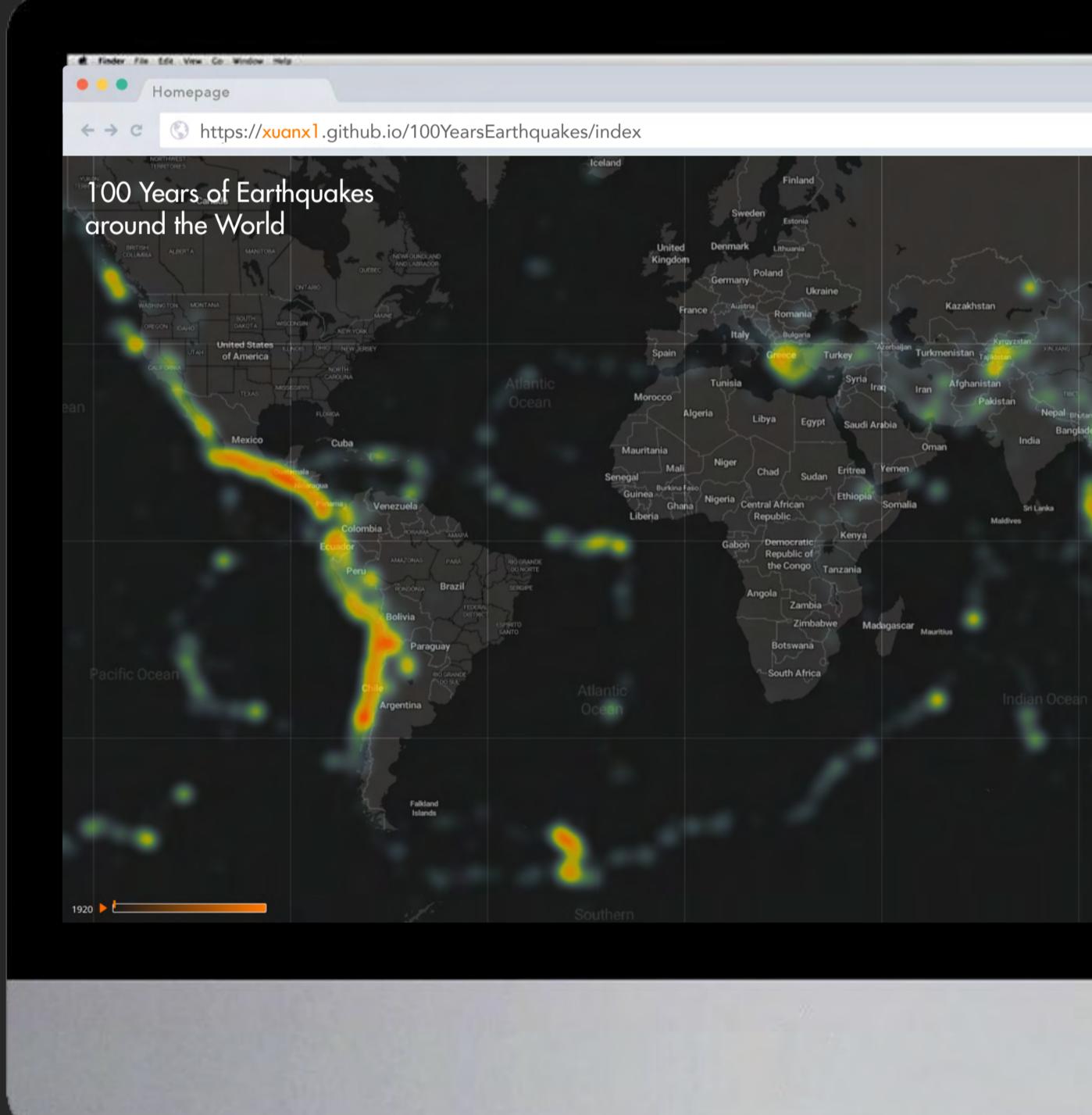
## 100 Years of Earthquakes

A time-lapse of quakes through the years,  
Shows Earth's shifting, its tremors and fears.

# 100 Years of Earthquakes around the World

A visualization mapping 100 years of earthquakes from 1923 to 2023 reveals a dynamic picture of global seismic activity, capturing the frequency, magnitude, and distribution of tremors across the planet.

It includes a world map overlaid with color-coded points or circles, where each point represents an earthquake event, with larger circles and deeper colors indicating higher magnitudes.

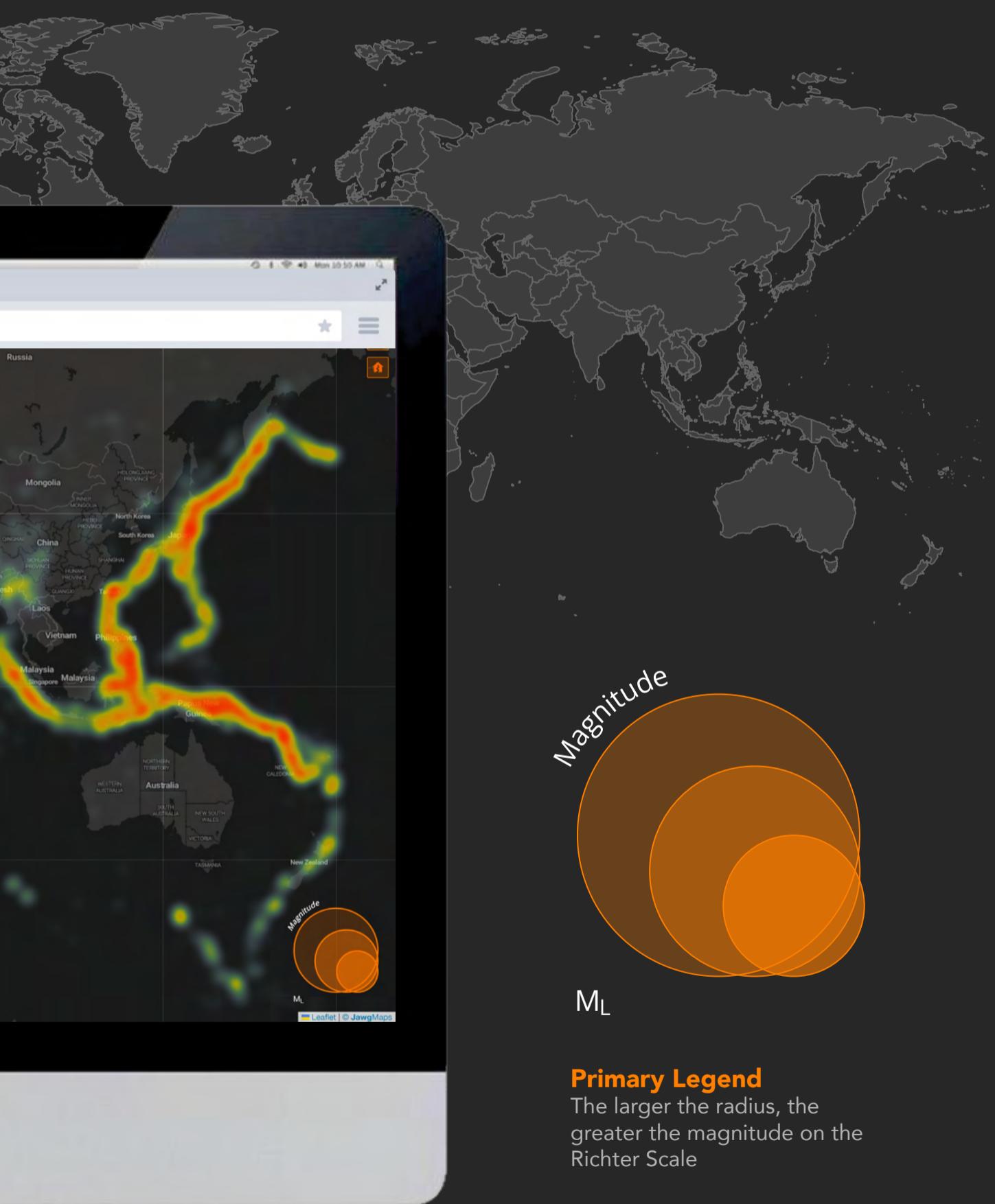


Temporal progression highlights earthquake patterns by decade, showing clusters in tectonically active zones like the Pacific "Ring of Fire" and areas around major fault lines in Asia, North and South America, and parts of Europe.

2004



Interactive features, like zooming into specific regions or filtering by magnitude and year, allow viewers to explore areas of interest or significant historical events, such as the 1964 Alaska earthquake or the 2011 Japan earthquake. An animated time-lapse effect brings the visualization to life, illustrating how seismic activity has shifted or intensified over the century.



#### Primary Legend

The larger the radius, the greater the magnitude on the Richter Scale

# Controls



## Home

Flies the map back to Southeast Asia, home to the Ring of Fire



## Heat Map Overlay

Toggles On / Off visibility of a Earthquake Heatmap



## Earthquakes Location Overlay

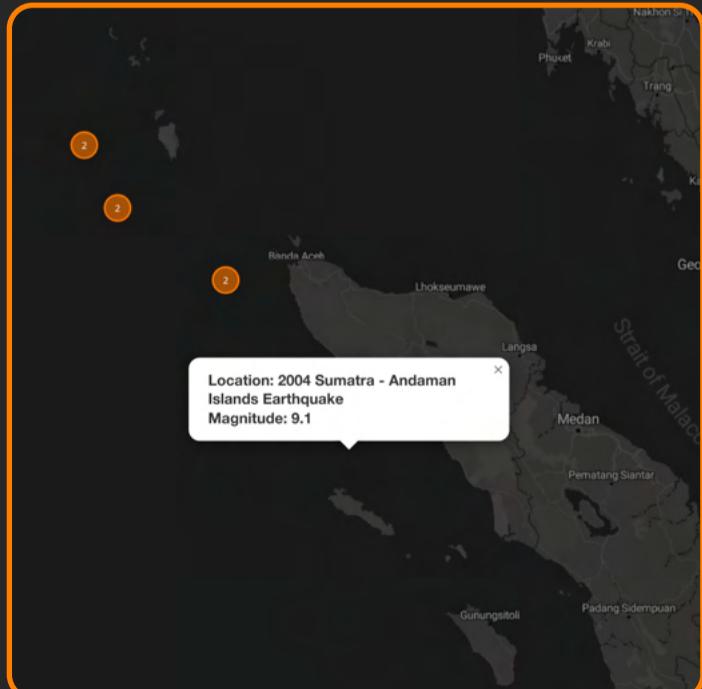
Toggles On / Off visibility of Earthquake Locations

# Gestures



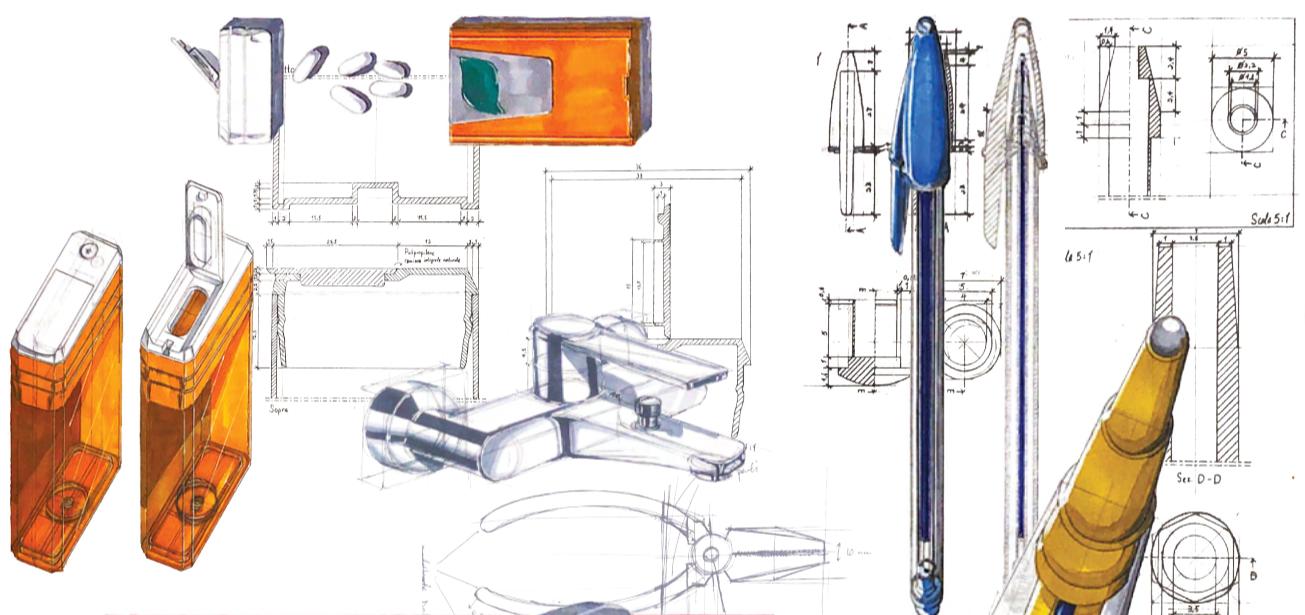
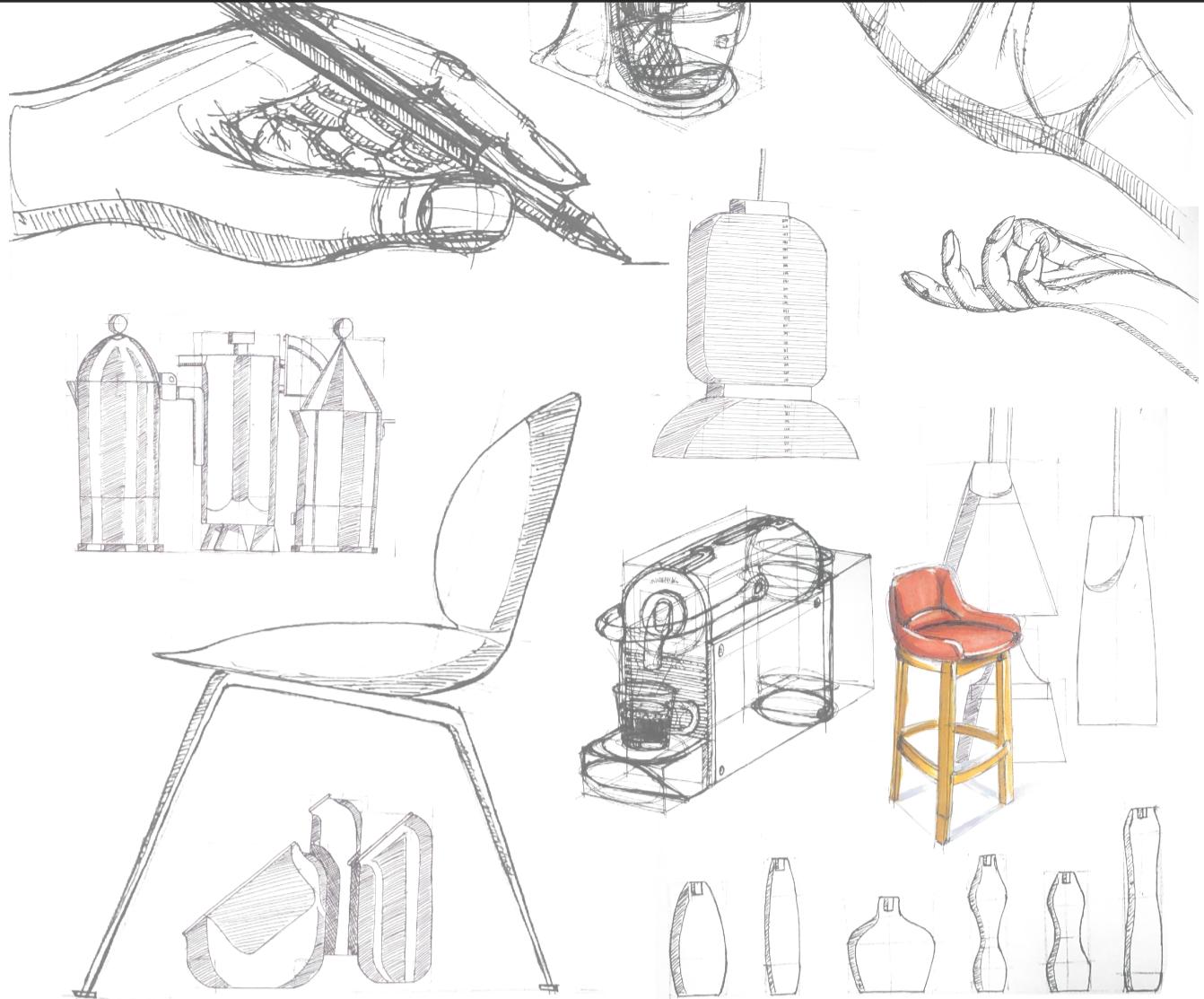
## Click

Toggles On / Off visibility of differnt layers.



## Hover

Toggles On / Off visibility of the Tooltip, with detailed information of a specific earthquake.





## Contact Details

 +65 9636 9362

 tanx329@newschool.edu