

DEVCON LAGUNA HACKATHON & CODE CAMP SERIES 2024

CONCEPT PAPER

TITLE: HACK-'D-CODE: CODING THE FUTURE AS THE SHAPE OF TOMORROW

HACKATHON

EVENT	DATE AND TIME	VENUE
Registration	April 10 to April 25, 2024; 11:59 AM	Online via Google Form
Qualifiers	April 26, 2024 (Friday); 1:00 PM - 5:00 PM	University of Perpetual Help System Laguna, Biñan
Semi-Finals	May 4, 2024 (Saturday); 1:00 PM - 5:00 PM	Pamantasan ng Cabuyao, Cabuyao
Finals	May 11, 2024 (Saturday); 1:00 PM - 5:00 PM	Mapua Malayan Colleges Laguna, Cabuyao

CODE CAMP

EVENT	DATE AND TIME	VENUE
Registration	April 10 to April 25, 2024; 11:59 AM	Online via Google Form
1ST CODE CAMP	April 26, 2024 (Friday); 10:00 AM - 12:00 NN	University of Perpetual Help System Laguna, Biñan
2ND CODE CAMP	May 4, 2024 (Saturday); 10:00 AM - 12:00 NN	Pamantasan ng Cabuyao, Cabuyao
3RD CODE CAMP	May 11, 2024 (Saturday); 10:00 AM - 12:00 NN	Mapua Malayan Colleges Laguna, Cabuyao

I. RATIONALE

DEVCON Laguna Hackathon can be a strategic move to address several key reasons, leveraging the insights from the provided search results and general knowledge about the developer and tech industry landscape:

- 1) **Examining Developers Knowledge and Skills:** With the rapid and fast-paced growth of technology, there is a necessity to assess the participant's knowledge, prowess, and skills towards the usage of various technologies and application of the best practices in coding. This can further benefit and enhance their understanding and proficiency towards the technological landscape and equipment being used in the industry. This also provides a platform of interest to all participants across sectors such as

professionals, technical enthusiasts, and students who want to upskill and challenge themselves in creating applications that can make an impact in the industry.

- 2) **Promoting Innovation and Creativity:** While this event develops the knowledge and skills of the participants, it also conjoins as a platform of innovation as it opens opportunities for them to create a significant contribution to the industry. With this, it also extends to them in expressing their creativity using the various technological tools and known stacks to develop formidable applications and projects that solve a revolving problem in society. This also forms a collaboration among the participants as they exchange ideas that lead to possible start-ups.
- 3) **Supplying Possible Solutions in Existing Complications:** By the technology knowledge and skills that every participant possesses, they can formulate technologies and applications that can drive innovative solutions to the existing problems in various industries and sectors. This enables the participants to explore applications of technology that can lead to filling the gaps and addressing the challenges in various industries.
- 4) **Strengthening the Existing Tech Community:** The event provides a platform for developers, professionals, enthusiasts, and students to connect with each other to exchange their ideas, and knowledge, and share experiences among themselves. This will further build camaraderie and strong relationships within the community that can help attract possible opportunities for them in the future.
- 5) **Equipment and Enhancement of Developers:** With the continuous development of technology, the event stimulates the growth and enhancement of the participants in terms of technical and interpersonal skills, abilities, and knowledge that can be utilized in dealing with real-world challenges and in their professional careers. The experiences obtained in this platform will pave countless ways to equip them for the technical professional path that they have chosen.

II. DEVCON LAGUNAs MISSION for HACKATHON

The DEVCON Laguna Hackathon, an initiative by DEVCON Laguna, is set to unfold this April. The event will give a platform for innovation and collaboration within the vibrant tech community of Laguna. By bringing together developers, designers, entrepreneurs, and students, this event catalyzes creativity and problem-solving, harnessing the collective expertise to tackle pressing societal challenges. Through a dynamic environment conducive to ideation and experimentation, participants will have the opportunity to showcase transformative projects addressing key areas such as sustainability, community empowerment, and financial inclusion. With the Hackathon, DEVCON Laguna endeavors to cultivate a culture of innovation and community engagement, propelling forward-thinking ideas into tangible and impactful solutions that benefit the local community and beyond.

- (1) **Support Skill Development:** DEVCON Laguna Hackathon, we aim to offer participants opportunities to learn new technologies, tools, and methodologies relevant to decentralized applications (dApps), blockchain, and smart contracts. Through workshops, tutorials, and mentorship, participants can enhance their skills in blockchain development, decentralized finance (DeFi), and Web 3 technologies. This focus on skill development ensures that participants gain practical experience and expertise in state-of-the-art technologies, enhancing their employability and readiness for the future of the web.
- (2) **Address Societal Challenges:** The Hackathon of DEVCON Laguna emphasizes addressing societal challenges by encouraging projects that leverage blockchain and Web 3 technologies for social good, sustainability, and community development. Participants are encouraged to tackle issues such as financial inclusion, supply chain transparency, identity management, and environmental sustainability. By focusing on these challenges, participants can create innovative solutions that have a positive impact on society and bridge the gaps on those challenges, demonstrating the potential of Web 3 technologies to drive meaningful change.
- (3) **Create Networking Opportunities:** One of the aims of the Hackathon is to create networking opportunities for participants to connect with potential collaborators, mentors, and industry professionals. Through networking sessions, panel discussions, and one-on-one interactions, participants can build valuable relationships within the Web 3 community. These connections can lead to future collaborations, mentorship opportunities, and even job offers, helping participants to further their careers in the blockchain and Web 3 space. Additionally, with the commitment of DEVCON Laguna to widen the scope of South enthusiasts, this platform will allow the participants to network and share knowledge, ideas, and best practices, fostering a collaborative and supportive environment within the hackathon community.
- (4) **Focus on Innovation and Entrepreneurship:** This event encourages participants to bring their ideas and projects to foster innovation and entrepreneurship in the blockchain and decentralized technology space. By providing a platform for participants to showcase their projects, receive mentorship, and connect with potential investors and collaborators, we aim to support the development of new ventures and solutions. This focus on innovation and entrepreneurship empowers participants to take their ideas from concept to reality, driving forward the evolution of Web 3 technologies and the broader blockchain ecosystem.
- (5) **Driving Technology in Filling Gaps:** The integration of technological concepts, tools, and principles can be adopted by various industries in solving existing problems. Using a proper technological methodology will enable the participants to create limitless possibilities of filling the gaps present in the industries and sectors.
- (6) **Cultivate a Community:** The hackathon is dedicated to fostering a sense of community among participants. This creates a supportive and inclusive environment wherein collaboration and learning thrive. Additionally, through team-building activities, networking sessions, and community-driven initiatives, it aims to connect participants with like-minded individuals who share the same passion for Web 3 technologies. By

cultivating this sense of community, we not only enhance the overall hackathon experience but also lay the foundation for long-lasting relationships and collaborations within the Web 3 ecosystem.

III. EVENT OBJECTIVES

- A. Educational Enhancement - The hackathon provides hands-on learning experiences beyond the classroom, challenging participants to solve real-world problems and enhance their critical-thinking skills as they develop their application.
- B. Collaboration and Innovation - It fosters teamwork and exchanging ideas among diverse participants that allow them to create innovative solutions.
- C. Address Real-World Challenges - Participants tackle practical problems that allow them to contribute to our society.
- D. Skill and Product Development - The hackathon offers a platform to enhance skills in developing new products or solutions.
- E. Research and Development - It promotes the exploration of new ideas and technologies in a supportive environment.

IV. EVENT PARTICIPANTS

- College Students
 - Teacher/Coaches
 - Industry Partners and Speakers
 - Judges
- The judges must possess the following:
- A strong connection to ICP Platform
 - Web 3 developer
 - Has expertise in business process analyst

V. EVENT MECHANICS

Technology to Use: ICP Platform

About the Platform:

With the birth of Web 3, development and progress has created a huge jump towards innovation. Through the growing foundation of blockchain, smart contracts, etc., developers can leverage their skills and their developed systems and products, toward a more secure, and advanced form of development. Web Development in particular to Web 3 shows a great comparison to the previous Web era, thus, with this emerging technology, ICP with their initiatives, have created a platform that allows users to incorporate blockchain into creating websites

The Internet Computer is a decentralized network that enhances the public Internet by enabling the creation of various systems and services using "canister software," an advanced form of smart contracts. It allows the development of Web3

services and enterprise systems directly on the Internet Computer, offering scalability. These services can include social networks, media streaming platforms, and more, ensuring tamperproof operations and secure interactions with external systems.

Expected Output:

Web projects utilizing the web 3 technologies, through the use of ICP platform, focusing on **SDG8: Decent work and economic growth** and **SDG11: Sustainable cities and communities**

Brief overview of the SDG8 and SDG11:

SDG8: Decent work and Economic Growth

SDG 8 aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. It addresses various aspects of economic development, job creation, and labour rights, with a focus on improving living standards and reducing inequalities.

Key Focus:

Economic Growth: Achieve a sustainable annual GDP growth rate, particularly in least developed countries, to support economic development and poverty reduction.

Productivity and Innovation: Enhance economic productivity through diversification, technological upgrading, and innovation, with a focus on high-value added and labour-intensive sectors.

Job Creation: Promote policies that support productive activities, entrepreneurship, and the growth of micro, small, and medium-sized enterprises, aiming to create decent jobs.

Resource Efficiency: Improve global resource efficiency in consumption and production to decouple economic growth from environmental degradation.

Employment and Decent Work: Achieve full and productive employment for all, including women, young people, and persons with disabilities, with equal pay for work of equal value.

Youth Employment: Reduce the proportion of youth not in employment, education, or training, by providing opportunities for skill development and job placement.

Labor Rights and Safety: Protect labour rights and promote safe working environments for all workers, including migrant workers and those in precarious employment.

Sustainable Tourism: Promote sustainable tourism that creates jobs and promotes local culture and products.

Financial Inclusion: Strengthen domestic financial institutions to expand access to banking, insurance, and financial services for all.

Sustainable Development Goal 11: Sustainable Cities and Communities

SDG 11 focuses on making cities and human settlements inclusive, safe, resilient, and sustainable. It aims to improve living conditions, promote sustainable urbanisation, and protect cultural and natural heritage, while addressing the needs of vulnerable populations.

Key Focus:

Transport Systems: Provide access to safe, affordable, accessible, and sustainable transport systems, with a focus on expanding public transport and improving road safety for vulnerable groups.

Urbanisation: Enhance inclusive and sustainable urbanisation, and improve human settlement planning and management.

Cultural and Natural Heritage: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

Disaster Risk Reduction: Reduce the number of deaths, affected people, and economic losses caused by disasters, with a focus on protecting the poor and vulnerable populations.

Environmental Impact: Reduce the adverse environmental impact of cities, particularly focusing on air quality and waste management.

Access to Green Spaces: Provide universal access to safe, inclusive, accessible, green, and public spaces, particularly for women, children, older persons, and persons with disabilities.

Urban-Rural Links: Support positive economic, social, and environmental links between urban, peri-urban, and rural areas through development planning.

Policy Integration: Increase the number of cities and human settlements adopting integrated policies and plans towards sustainability, resilience to disasters, and climate change mitigation and adaptation.

Keynote: Teams are encouraged to contextualise their projects, in giving solutions to day-to-day problems of the local cities

Registration

All participating teams should register via **Google Form**

<https://forms.gle/2Wh6wTbcN4chu5H96>

on or before April 25, 2024 at 11:59 AM, to submit their concept paper (the project idea that they want to propose and pitch to the competition), with the following parts:

- Title of the Project
- Team Name and the members
- Executive Summary of the Project concept
- Problem Statement - referring to the problems and situations that fall under the stated SDGs. Describe the problem your project aims to solve
- Solution Overview - the general idea of the project you want to propose a solution to the problem
- Significance of the Project - explaining how the project addresses the problem. Indicate the target audience and beneficiaries of the proposed project
- Technology Stack - Aside from the Internet Computer Platform, list all the technologies, frameworks, and tools you plan to use in the project

Minimization Requirements:

Each member should have:

- **3-5 members** where each participant should be a current college student
- 1 coach or adviser
- A team name to identify their group throughout the hackathon series
- A laptop with the following installed programs:
 - VSCode
 - Git-Scm
 - Putty
 - Node.js
 - and has as a setup of local environment such as of WSL and DFX

You may refer to the official link of ICP for the requirements

<https://icp-hub-ph.gitbook.io/manual/code-camp/prerequisites>

- A GitHub account and a GitHub repository to store the outputs
 - Each Team must **use the name / title of the project** as the name of their Git Repository

*To note: for each team to gain an initial understanding of the ICP platform, the recorded video of the workshop entitled “**iThink Code Camp: From Zero to Hero (Online Workshop)**” hosted by Mr. Eliezer Rabadon, Technical Lead, stream on March 13, 2024*

Youtube Link: <https://www.youtube.com/watch?v=jiojgP5HgDI>

Prerequisites:

At least one member of the team should have the knowledge to the following:

- Setting up their GitHub accounts
- Web development languages such as TypeScript, React, Next.js, etc.
- A familiarity level on the web 3 technologies like blockchain

The compiled entries will be forwarded to the judges for pre-reading. Qualified teams advancing to the Quarter Finals will be notified via email.

Selection:

- The entries will be ranked per municipality.
- The top 3 entries per municipality will secure a slot to the quarter-finals.
- Teams advancing to the quarter-finals will receive a notification on or before April 12, 2024.
- The qualified teams will be invited for an online briefing.

Criteria:

- | | |
|-----------------------------|-----|
| • Impact and Relevance | 50% |
| • Feasibility and Viability | 50% |

Quarter Finals

The **morning session during the quarter-finals will be a code camp for an introduction of the ICP platform** with the aim to demonstrate how the ICP platform works in the Web 3 environment to the qualifying teams. **The project pitching will be done in the afternoon where 50% of the total number of teams will be selected to proceed to the semi-finals.**

Project Pitch:

- The teams will be given 5 minutes to pitch their project.
- The teams will also be given 5 minutes to answer questions from the judges after the presentation.

Criteria:

- | | |
|-----------------------------|-----|
| • Impact and Relevance | 25% |
| • Feasibility and Viability | 25% |
| • Presentation Quality | 20% |
| • Innovation and Creativity | 20% |
| • Market Potential | 10% |

Semi-Finals

The morning session is dedicated to further development and refinement of the current projects, to be expected for them to have initial progress on the development phase of the project. **The qualifying teams will be presenting their final project pitches in the afternoon where 25% of the total number of teams will be selected to proceed to the finals.**

Project Pitch:

- The teams will be given 5 minutes to pitch their project.
- The teams will also be given 5 minutes to answer questions from the judges after the presentation.
- The teams must present a minimum viable product and their mock-up.

Criteria:

- | | |
|-----------------------------|-----|
| • Feasibility and Viability | 25% |
| • Presentation Quality | 10% |
| • Innovation and Creativity | 25% |
| • User Experience (UX) | 25% |
| • Implementation Quality | 15% |

Finals

Industry talks will be conducted in the morning while the teams are finalising their projects. All registered participants since the elimination round will be invited to an open event with talks exclusively about Web3 and ICP.

The finalists will present their work in and shall be given 10 minutes to present and 10 minutes for question and answer. The presentation setup will be in a tech conference setup with them having to present their work on the stage in front of the judges and all of the audiences. The finalist are encouraged to wear a semi-formal attire to formally present their project to the general public

Criteria:

Criteria	Description	Score
Innovation and Creativity	Assess the uniqueness and originality of the idea. Consider whether the project introduces a novel approach or solves a problem in a new way.	15%
Technical Complexity	Evaluate the technical complexity of the project. This could include the use of advanced technologies, algorithms, or integrations.	15%
Feasibility and Viability	Consider the feasibility of implementing the project in a real-world scenario. Evaluate whether the idea is practical, scalable, and sustainable.	15%
Impact and Relevance	Assess the potential impact of the project. Consider its relevance to the theme of the hackathon and its potential to address a significant problem or need.	15%
User Experience (UX)	Evaluate the user experience of the project. Consider the design, usability, and intuitiveness of the interface.	10%
Implementation Quality	Assess the quality of the implementation. Consider factors such as code cleanliness, efficiency, and robustness.	10%

Presentation Quality	Evaluate the quality of the pitch presentation. Consider factors such as clarity, engagement, and persuasiveness.	5%
Market Potential	Assess the market potential of the project. Consider factors such as target audience, competition, and scalability.	5%
Team Collaboration	Evaluate the teamwork and collaboration demonstrated by the team. Consider how well the team members worked together to develop the project.	5%
Overall Impression	Consider the overall impression of the project. This could include factors such as the enthusiasm of the team, the coherence of the presentation, and the potential for future development.	5%
TOTAL		100%

- Awards:
- GRAND WINNER -
 - 1ST RUNNER UP -
 - 2ND RUNNER UP -
- Special Awards:
- **Most Innovative:** Awarded to the project that demonstrates the most innovative and creative solution to a problem.
 - **Best User Experience (UX):** Awarded to the project with the most intuitive and user-friendly interface.
 - **Best Technical Implementation:** Awarded to the project that showcases exceptional technical skill and complexity.
 - **Best Pitch:** Awarded to the team with the most compelling and persuasive project presentation.
 - **Social Impact Award:** Awarded to the project that has the potential to create a significant positive impact on society or the environment.

VI. EVENT PROGRAM FLOW - HACKATHON

QUARTER FINALS	
TIME	ACTIVITY
12:30PM - 1:00 PM	Registration and Check-in
1:00 PM - 1:05 PM	Program Introduction
1:05 PM - 1:10 PM	Opening Remarks
1:10 PM - 1:25 PM	Hackathon Mechanics
1:25 PM - 2:40 PM	Team Individual Preparation
2:40 PM - 2:55 PM	Break
2:55 PM - 4:25 PM	Pitching
04:25 PM - 04:50 PM	Deliberations
04:50 PM - 05:00 PM	Announcement of Qualified Teams

QUARTER FINALS	
TIME	ACTIVITY
12:30PM - 1:00 PM	Registration and Check-in
1:00 PM - 1:05 PM	Program Introduction
1:05 PM - 1:10 PM	Opening Remarks
1:10 PM - 1:25 PM	Hackathon Mechanics
1:25 PM - 2:40 PM	Team Individual Preparation
2:40 PM - 2:55 PM	Break
2:55 PM - 4:25 PM	Pitching
04:25 PM - 04:50 PM	Deliberations
04:50 PM - 05:00 PM	Announcement of Qualified Teams

QUARTER FINALS	
TIME	ACTIVITY
12:30PM - 1:00 PM	Registration and Check-in
1:00 PM - 1:05 PM	Program Introduction
1:05 PM - 1:10 PM	Opening Remarks
1:10 PM - 1:25 PM	Hackathon Mechanics
1:25 PM - 2:40 PM	Team Individual Preparation
2:40 PM - 2:55 PM	Break
2:55 PM - 4:25 PM	Pitching
04:25 PM - 04:50 PM	Deliberations
04:50 PM - 05:00 PM	Announcement of Qualified Teams

VII. EVENT PROGRAM FLOW - CODE CAMP

UNIVERSITY OF CABUYAO (PNC)

TIME	ACTIVITY
09:00 AM - 9:45 AM	Registration and Check-in
09:45 AM - 9:55 AM	Pre-Event Checklist
09:55 AM - 10:00 AM	Pre-Event Preparations
10:00 AM - 11:55 AM	CODE CAMP PROPER
11:55 AM - 12:00 NN	Announcement of Participants who completed the Smart Contract

UNIVERSITY OF PERPETUAL HELP LAGUNA - BIÑAN CAMPUS (UPHSL BIÑAN)

TIME	ACTIVITY
09:00 AM - 9:45 AM	Registration and Check-in
09:45 AM - 9:55 AM	Pre-Event Checklist
09:55 AM - 10:00 AM	Pre-Event Preparations
10:00 AM - 11:55 AM	CODE CAMP PROPER
11:55 AM - 12:00 NN	Announcement of Participants who completed the Smart Contract

MAPUA MALAYAN COLLEGE LAGUNA (MMCL)

TIME	ACTIVITY
09:00 AM - 9:45 AM	Registration and Check-in
09:45 AM - 9:55 AM	Pre-Event Checklist
09:55 AM - 10:00 AM	Pre-Event Preparations
10:00 AM - 11:55 AM	CODE CAMP PROPER
11:55 AM - 12:00 NN	Announcement of Participants who completed the Smart Contract

VIII. EVENT CORE TEAM

Heads:

Head Of Operations - John Christian Esmasin

Head Of Events - John Cedric Gaza

Head Of Logistics - Paolo Buenaventura

Head Of Marketing - John Kenneth Timblaco

DEVCON Laguna Officers:

Sean Cosep

Mica Erispe

Mark Anthony Hernandez

Rhealyn Javier

Kharisa Mae Pasion

Stephanie Mariz Rano

Sheena Jane Toroy

Core Team - Events and Operations Team

Team	Description	Team Lead
Venue and Set Design Team	Responsible for the design of the stage and the overall layout and management of the venue of the event	Kharisa Mae Pasion
Program Operations Team	Ensures the proper execution of the Event Flow	Mica Allana Erispe
	Stage Management Team - manages activities on the event stage, including speakers and presentations. The time manager is included here.	
Technical Team	Handles the management of audiovisuals, lighting, and technical aspects of the event	John Christian Esmasin
	Audiovisual Team - Responsible for setting up and operating audiovisual equipment, including sound systems, microphones, projectors, and screens. Ensures high-quality audiovisual experience for attendees and virtual participants.	
	Lighting Team - Designs and implements lighting schemes for the event venue, considering both aesthetic and functional aspects. Works closely with the stage management team to ensure proper lighting for speakers and presentations.	
	Streaming and Virtual Platform Team - Manages the technical setup for online participants, including streaming platforms, virtual meeting software, and online collaboration tools. Ensures seamless integration between onsite and online components of the eve	Sheena Jane Toroy
	IT Support Team - Provides technical support for all IT-related issues during the event, including network connectivity, hardware troubleshooting, and software support. Ensures smooth operation of all IT systems.	

	<p>Backup and Contingency Team - Develops and implements backup plans for technical failures, such as power outages, equipment malfunctions, or internet connectivity issues. Ensures minimal disruption to the event in case of emergencies.</p> <p>Post-Event Technical Support Team - Provides technical support after the event, such as archiving event recordings, analysing technical feedback, and preparing reports for future events.</p>	
Registration and Post Event Team	Manages the registration processing of the event	John Cedric Gaza
	Registration Coordinator - Manages attendee registration process.	
	Feedback Collection Team - Collects feedback from attendees post-event	
Hospitality Team	Manages guests services including accommodation, catering and VIP handling	Sean Cosep
Cleanup Team	Ensures the proper execution of clean up after the event proper	Stephanie Mariz Rano
	Cleanup Supervisor - Oversees post-event cleanup activities.	
	Waste Management Team - Manages waste disposal and recycling during and after the event.	
Safety and Security Team	Ensures the safety during the event	Mark Anthony Hernandez
	Safety Coordinator - Develops and implements safety protocols for the event.	
	Security Team - Provides event security and crowd management.	

Core Team - Logistics Team

Team	Description	Team Lead
Equipment Coordinating Team	Manages equipment procurement, setup, and maintenance.	Rhealyn Javier
Supply Coordinating Team	Manages procurement and distribution of event supplies	
Technical Setup Team	Assists in setting up technical equipment and ensures proper functioning.	Paolo Buenaventura

Emergency Response Team	Develops and implements emergency response plans for the event.	
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Core Team - Marketing Team

Creatives Team - John Kenneth Timblaco

- Visuals Committee - Publication Materials
 - Pre Event Contents
 - During Events
 - Post Event
- Content Committee
 - Captions
 - Graphic Designers: Create visual assets for promotional materials.
 - Copywriters: Write copy for marketing materials and social media posts.
- Social Media Team
 - Post Scheduling
 - Real-Time posting during “during event proper”
 - Other marketing posts
- On event media team
 - Cameramen
 - Audio Men

PREPARED BY:

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JOHN CHRISTIAN ESMASIN
Head Of Operations

PAOLO BUENAVENTURA
Head Of Logistics

JOHN CEDRIC GAZA
Head Of Events

JOHN KENNETH TIMBLACO
Head Of Marketing

APPROVED BY:



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