# NCS HACK

# HACKER GUIDE

NiT Numidia Institute of Technology  X  NIT COMPUTER SOCIETY CLUB
IN THE PURSUIT OF EXCELLENCE

# Introduction :

Welcome to NCS HACK !

Welcome to NCS HACK , the epicenter of innovation and creativity!

At NCS HACK , we go beyond coding; we're about pushing boundaries, breaking through limitations, and turning groundbreaking ideas into reality!

This Hacker Guide contains everything you need to succeed at this event. Dive into the challenges, choose the one that ignites your passion, and bring your most creative solutions to life. Be sure to familiarize yourself with the evaluation criteria to optimize your performance.

The stage is set, and the challenges await! Let the hacking adventure begin!

# NCS HACK

## Guidelines :

- The first phase of NCS HACK Algiers will take place online from May 23st to May 25th, ending at Midday.

- You are free to use any technology of your choice. Participants must select one of the four provided challenge tracks.

- Submissions are due by Midday on May 25th.

- Mentors will be available 24/7 to offer guidance and assistance.

- Stay tuned for regular updates, announcements, and essential information via the event's Discord space.

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# CHALLENGES

## 1. Empowering Health at Your Fingertips

In many communities, accessing timely healthcare is a challenge due to distance from medical facilities and other barriers like busy schedules or mobility issues. Limited in-person interactions and increased workloads for healthcare providers further exacerbate these difficulties. Telehealth has been a vital lifeline, but it's clear that it can be further optimized to meet the growing demand.

This challenge seeks innovative solutions to enhance telehealth, addressing issues of monitoring, user experience, and integration into healthcare workflows. Are you ready to drive change and improve patient well-being by revolutionizing telehealth solutions?

# 2. Enhancing Access to Patient Medical Histories

Modern healthcare delivery faces a significant challenge: the fragmentation of patient medical histories across disparate digital records and data sources. This complexity hinders providers from promptly retrieving accurate patient information, leading to: medications, causing delays and frustration for both patients and providers.

Repetitive Patient Inquiries: During consultations, doctors must repeatedly ask about existing medical conditions and medications, causing delays and frustration for both patients and providers.

A Solution-Oriented Approach: NCS HACK aims to address this by seeking solutions that integrate and streamline patient medical histories, making them easily accessible to healthcare providers.

# 3. Optimizing Medication Management: Ensuring Safety and Efficiency from Production to Patient Care

Optimizing Medication Management focuses on enhancing the entire lifecycle of medication products. From production and distribution to storage and patient adherence, this theme addresses the critical need for efficiency, safety, and effectiveness in the pharmaceutical supply chain. By leveraging technology and data, innovative solutions can ensure medications are safe, available, and used appropriately, ultimately improving patient outcomes.

## 4. Innovative Approaches to Streamlining Medical Appointments :

In the realm of healthcare, managing medical appointments has become increasingly challenging due to rising demand and the necessity for social distancing measures. Patients often face long wait times, while healthcare providers struggle to optimize schedules and maintain effective communication. These inefficiencies not only impact the quality of care but also diminish patient satisfaction. NCS HACK recognizes the challenges in medical appointment management, including complexities in scheduling, long wait times, and communication gaps between patients and providers. These issues are triggered by increased demand and the need for social distancing. We understand the impact of inefficiencies on patient care quality and satisfaction. Our goal is to address these challenges by developing innovative strategies that simplify appointment processes, reduce wait times, appointments booked for distant future dates and enhance patient-provider communication. Through our efforts, we aim to revolutionize medical appointment management and improve the overall patient experience.

# Evaluation Criteria:

## Innovation

Creative Problem-Solving: To what extent does the solution demonstrate innovative thinking and creative problem-solving?

Boundary-Pushing: Does the project push boundaries and introduce novel concepts, approaches, or features?

## Impact

Challenge Impact: What potential impact does the solution have on addressing the specified challenge?

Positive Change: How effectively does the project contribute to making a positive change or improvement?

## Technology and Platform aAlignment

Suitability:How well-suited are the chosen technologies and platforms to address the problem at hand?

Rationale:Is there a clear rationale for the selection, considering scalability, efficiency, and relevance?

## Usability

User-Friendliness: How user-friendly is the solution?

Intuitive Interface:Is the interface intuitive, and can users easily navigate through the features?

## Design Completion

Visual Appeal: To what extent is the overall design of the solution visually appealing and coherent?

Consistency:Are design elements consistent and aligned with the intended user experience?

## Quality and Completeness of Prototype & Demo

Representation:How well does the prototype represent the intended solution?

Comprehensiveness:Is the demo comprehensive, showcasing key functionalities, and providing a realistic user experience?

## Quality of Presentation :

Communication:How effectively does the team communicate their ideas, goals, and the overall solution during the presentation?

Engagement: Is the presentation engaging, well-structured, and tailored to the target audience?

## Clarity :

Problem-Solution Alignment: How clearly is the problem addressed, and does the solution align with the chosen track?

Communication:Are key aspects of the project, including methodologies and outcomes, clearly communicated?

## Effectiveness :

Problem-Solving : To what degree does the solution effectively address the identified problem or challenge?

Objective Alignment: How well does the project meet the objectives outlined in the track

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# Submission :

To ensure a smooth and efficient submission process, please adhere to the following guidelines:

**Team Information :**
Include the names and roles of all team members.
**Problematic Track :**
State the chosen problematic track (e.g., Medical Histories , Medical Appointments,or Optimizing Medication Management).

**Solution Overview :**
Provide an overview of your solution, highlighting key features and functionalities.
Include a brief explanation of how your solution addresses the identified problem.

**Technologies Used :**
Enumerate the technologies, frameworks, and platforms utilized in your project.
Highlight any innovative or unconventional choices and explain their significance.

**Usability and Design :**
Showcase the user interface and experience through screenshots or a demo video.

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## Prototype and Demo
Submit a comprehensive prototype showcasing key functionalities.Provide a link to a demo video demonstrating the solution in action.

## Presentation Materials
Include presentation slides or materials used during the live presentation.
Ensure these materials effectively communicate your solution, emphasizing its innovation and impact.

## Code Repository
Provide a link to your code repository (e.g., GitHub).
Ensure the repository is accessible and well-documented for review.

## Optional Extras
Include any additional documentation, diagrams, or supplementary materials that enhance the understanding of your project.

## Submission Deadline
Submissions must be received by May 25th at 12AM.
Late submissions may not be considered for evalution.