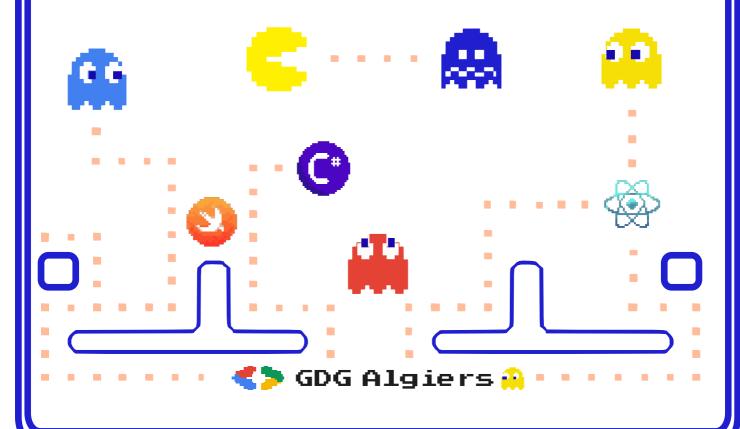


# Hacker Guide



#### Introduction

GDG and student communities face numerous challenges. As students and active members of GDG, you are in a unique position to identify these challenges and propose creative solutions that can help both communities thrive.

it's improving student learning experiences, Whether supporting self-development, or equipping GDG with better tools for efficiency, your ideas can make a real impact.

This hackathon is all about building innovative solutions for real problems.

Get ready to challenge yourself, collaborate, and showcase your best work!

GDG HMCK

# First challenge : Enhancing GDG's Internal Processes

#### Introduction:

Each year, GDG evolves, refining its internal processes and tools to enhance club organization and maximize its impact. This season, we aim to make significant progress in this area by launching the GDG App Store—a collection of applications and platforms designed to automate, facilitate, and elevate the GDG learning experience. To achieve this ambitious goal, we need your creative solutions!

### Your Mission:

Your challenge is to develop applications that will help the club operate more efficiently and shine even brighter. You are free to propose any solution that aligns with this theme. To help you brainstorm, here are some suggested topics, each addressing a specific problem we currently face:

• Predicting the best time to launch events: With multiple universities (USTHB, ESI, ENP, etc.) having different academic schedules, it's challenging to find the perfect timing for events. An Al-powered tool could analyze study and exam calendars to suggest optimal event dates.

- Automating repetitive tasks: Consider the timeconsuming tasks you've observed in your department and think about how to automate them.
- Connecting GDG alumni with current members: GDG is growing older, and as a result, the number of alumni is increasing rapidly. Many of our alumni have already secured impressive positions in the industry. We want our new members to benefit as much as possible from their knowledge and experience. A dedicated platform could be highly beneficial in maintaining relationships and fostering mentorship between alumni and current members.

Your app can be anything

...as long as it helps GDG work smarter. Use our examples as inspiration, or surprise us with your own!

### Existing Solutions (Avoid Reinventing the Wheel):

- GDG Organizers App (tool for managing events and operations).
- GDG Learning Platform (platform for GDG learning resources).
- GDG Hackathon Hub (tool for hackathon submissions management).

# **Second challenge: Contributing to the Growth of the Student Community**

#### Introduction:

#### Picture this:

You're sitting in a lecture hall, staring at a poorly explained slide. The professor's voice fades into the background as you wonder, "How will I ever learn this alone?" Across campus, your peer Ahmed is scrolling through Instagram, missing a hackathon announcement he'd have loved to join. Meanwhile, grad student Yasmine debates quitting her coding project because she can't find teammates. And in a quiet library corner, first-year Sara dreams of connecting with alumni who once sat in her seat—"How did they land their first jobs? What paths are possible?"

These aren't hypotheticals—they're our shared reality. As students, we juggle fragmented resources, missed opportunities, and the quiet fear of being "stuck" in our comfort zones. But what if we could rewrite this story?

#### Your Mission:

Build a tool that aligns with this vision and enhances the student community experience. Create a tool that you would personally use every day, and why not redefine what it means to be a student in 2025.

Here are some suggested topics that you can work on (even though you aren't restricted to them):

- Advanced resource-sharing platforms beyond basic repositories (e.g., Al-powered recommendations, personalized learning paths, etc.).
- **Peer-to-peer mentorship** platforms where students can find study partners, tutors, or team members for projects.
- A centralized app for all upcoming events in a specific region and field (student clubs, national events, company-hosted events, etc.).
- Freelance project marketplace for students to collaborate and gain experience while earning.
- An anonymous career insights platform where university alumni share job titles, companies, and salaries to help students explore career paths and opportunities.

Of course, these are just **starting points** we encourage you to explore beyond these suggestions and bring **your own** ideas to the table!

#### **Existing Solutions (Avoid Reinventing the Wheel):**

- Basic folder-based (i.e drive-like) resource-sharing platforms already exist, so make sure your idea offers something truly valuable and different.
- This theme is still wide open, meaning there are fewer existing projects. Be creative and bring fresh ideas!

### **Judging Criteria**

Your projects will be evaluated based on:

- Impact & Relevance (20%) How well does your project address a real problem?
- Creativity & Innovation (20%) Is your solution unique and outside-the-box?
- **Technical Implementation (30%)** How well is your project built? (code quality, scalability, performance)
- User Experience & Design (15%) Is your project userfriendly and visually appealing?
- Bonus Points (15%) you will have bonus points if you use one of the following technologies or architectures :
  - WebSockets
  - Microservices Architecture
  - GraphQL
  - Containerization with Docker
  - Event-Driven Architecture (Kafka, RabbitMQ)
  - Al
  - blockchain
  - use of cloud services (AWS, GCP, Azure...etc)
  - gRPC (if you use microservices architecture)

### **Final Tips**

- Think Impact Your project should solve a real problem faced by GDG or students.
- Keep It Simple A well-executed simple idea is better than a half-done complex one.
- Work as a Team Collaboration is key! Communicate and distribute tasks effectively.
- Ask Questions If anything is unclear, reach out to the organizers for guidance.
- Have Fun! This is a learning experience as much as a competition. Enjoy the process!

## Warning

• Validate Your Topic - Before you start working, share your topic with the organizers for approval.

Bitawfi9! and may the best hackers win! 💡 🤚

