# GedIT Technical Domains - Descriptions & Basic Skill Requirements

# Web Development

## **Description:**

The Web Dev domain builds websites for GedIT initiatives, events, or internal tools. They ensure the design is user-friendly, modern, and functional. Whether it's a landing page for an event or a backend dashboard, this team makes it happen. Collaboration, design sense, and clean code are key.

#### **Skills Required:**

- Basic knowledge of HTML, CSS, JavaScript
- Exposure to React or any frontend framework
- Willingness to manage deployment (Netlify/Vercel)
- Understanding of Git/GitHub
- Ability to guide juniors and divide projects into modules

## **♣** App Development

#### **Description:**

This domain builds mobile apps for GedIT initiatives. These could be utility apps for events or showcase projects. The focus is on smooth UI, responsive design, and working integrations with backend services like Firebase.

#### **Skills Required:**

- Basic experience in Flutter or React Native (any one is fine)
- Knowledge of how to use Firebase (authentication, storage)
- Familiar with app debugging and UI design principles
- Ability to handle a small team and assign components
- Curiosity to explore new mobile tech (optional but welcome)

# 📚 DSA (Data Structures and Algorithms)

#### **Description:**

This domain builds the coding foundation of GedIT. From organizing problem-solving sessions to curating daily challenges and contests, it prepares members for coding rounds and interviews. It helps bridge the gap between academics and industry coding expectations.

#### **Skills Required:**

- Strong interest in solving problems on platforms like LeetCode or Codeforces
- Understanding of basic DSA concepts (arrays, recursion, trees, etc.)
- Willingness to learn and explain algorithms to juniors
- Can design contests and walkthroughs using tools like Google Forms/HackerRank
- Team spirit and encouragement mindset

# ia Al/ML/DS (Artificial Intelligence / Machine Learning / Data Science)

## **Description:**

This domain takes on real-world tech problems using machine learning and data analytics. It also explores AI concepts like chatbots, neural networks, and computer vision. The team runs workshops and mini-projects to help juniors get started in ML.

#### **Skills Required:**

- Familiar with Python and libraries like NumPy, Pandas
- Basic knowledge of ML algorithms like Linear Regression, Decision Trees
- Can build a small project using scikit-learn or Google Colab
- Curious about AI trends (LLMs, GPT, etc.)
- Comfortable explaining basic concepts to newcomers

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#### **Description:**

Blockchain is all about decentralization. This domain helps members explore smart contracts, cryptocurrencies, and dApps. It hosts interactive sessions and builds small demo projects to make Web3 more accessible.

#### **Skills Required:**

- Basic understanding of blockchain, Ethereum, tokens
- Exposure to Solidity and Remix IDE (small projects are fine)
- Can integrate a simple smart contract with a React frontend

- Willing to simplify complex concepts for juniors
- Open to experimenting and exploring rapidly changing tech

## M Game Development

#### **Description:**

Game Dev is the creative-tech zone of GedIT. The team builds simple 2D/3D games and teaches members about how games work—from logic and physics to art and audio. It balances both creativity and technical implementation.

## **Skills Required:**

- Experience with Unity or Godot (basic games okay)
- Understanding of scripting in C# or GDScript
- Can handle game loops, collisions, and UI
- Able to guide asset selection and game design flow
- Passion for gaming and creativity is a big plus

# Competitive Programming

#### **Description:**

This domain promotes fast and logical thinking through time-bound coding problems. The team organizes internal contests, mentor sessions, and prepares members for national and international coding competitions.

## **Skills Required:**

- Active on Codeforces/AtCoder/LeetCode (basic rating okay)
- Strong foundation in Time and Space Complexity
- Can solve and explain classical CP problems
- Experience in hosting virtual contests is a plus
- Collaborative and mentoring attitude for team growth