Google Developer Student Clubs
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Google Dev Challenges 2022-2023 (ML)

Machine Learning challenge:

- **A. ML Track**
  - ➢ Machine Learning APIs
  - ➢ Create ML Models with BigQuery ML
  - ➢ Integrate with Machine Learning APIs
  - ➢ Intermediate ML: TensorFlow on GCP
  - ➢ Advanced ML: ML Infrastructure
- **B. Data Science and Machine Learning**
  - ➢ Create and Manage Cloud Resources
  - ➢ Perform Foundational Data, ML, and AI Tasks in Google Cloud
  - ➢ Insights from Data with BigQuery
  - ➢ Create ML Models with BigQuery ML
- **C. Big Data**
  - ➢ BigQuery Basics for Data Analysts
  - ➢ Data Engineering
  - ➢ Baseline: Data, ML, AI
  - ➢ Insights from Data with BigQuery
  - ➢ Scientific Data Processing
- **D. Advanced Machine Learning and Cloud**
  - ➢ Advanced Topics
  - ➢ Engineer Data in Google Cloud
  - ➢ Integrate with Machine Learning APIs
  - ➢ Deploy and Manage Cloud Environments with Google Cloud
  - ➢ Deploy to Kubernetes in Google Cloud

Google Dev Challenges 2022-2023 (Cloud)

Track A - Cloud Engineering Track
Learn and demonstrate proficiency in key infrastructure topics to prepare for careers in cloud IT and DevOps.
[Create and Manage Cloud Resources](#)
[Perform Foundational Infrastructure Tasks in Google Cloud](#)
[Set Up and Configure a Cloud Environment in Google Cloud](#)
[Build and Secure Networks in Google Cloud](#)
Track B - Data Science and Machine Learning Track
Learn and demonstrate proficiency in key topics related to big data and machine learning to prepare for roles such as data analyst, marketing analyst, business intelligence professional, and data engineer.
[Create and Manage Cloud Resources](#)
[Perform Foundational Data, ML, and AI Tasks in Google Cloud](#)
[Insights from Data with BigQuery](#)
[Create ML Models with BigQuery ML](#)
Track C - Cloud Developer Track
Learn and demonstrate proficiency in key infrastructure topics to prepare for careers in cloud IT and DevOps.
[Serverless Cloud Run Development](#)
[Serverless Firebase Development](#)
[Optimize Costs for Google Kubernetes Engine](#)
[Automating Infrastructure on Google Cloud with Terraform](#)
Track-D: DevOps
[Quest1: Baseline: Infrastructure](#)
[Quest2: DevOps Essentials](#)
[Quest3: Implement DevOps in Google Cloud](#)
[Quest4: Kubernetes in Google Cloud](#)
[Quest5: Google Cloud Solutions I: Scaling Your Infrastructure](#)

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Google Dev Challenges 2022-2023 (Android)

Track-A: Android Basics in Kotlin

You'll learn the basics of building Android apps with the Kotlin programming language. Along the way, you'll develop a collection of apps to start your journey as an Android developer.

Unit 1: Kotlin basics

Unit 2: Layouts

  [Optional] Unit 3: Navigation

  [Optional] Unit 4: Connect to the internet

Track-B: Android Basics with Compose

You'll learn the basics of building Android apps with Jetpack Compose, the new UI toolkit for building Android apps. Along the way, you'll develop a collection of apps to start your journey as an Android developer.

Unit 1: Your first Android app app

Unit 2: Building app UI

  [Optional] Unit 3: Display lists and use Material Design

  [Optional] Unit 4: Navigation and app architecture

Track-C : Application deploying and Firebase

Serverless Firebase Development

Build Apps & Websites with Firebase

Deploying Applications

Baseline: Deploy & Develop

Track-D: Compose for Experienced Dev

  [Optional] Jetpack Compose for Android Developers

Google Dev Challenges 2022-2023 (Flutter)

Track-A: Intro to Flutter

Dart Essentials
Flutter Essentials
Flutter Development
Build Apps & Websites with Firebase

Track-B : Build apps with Flutter

Build apps with Flutter
Implement Material Design with Material Components for Flutter

Track-C : Add Firebase to your Flutter App

Add Firebase to your Flutter app
Build engaging cross-platform experiences with Firebase and Flutter

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Google Dev Challenges 2022-2023 (Web & Security)

Security
Security & Identity Fundamentals
Build and Secure Networks in Google Cloud
Secure and Rate Limit API calls with API Gateway
Ensure Access & Identity in Google Cloud
Secure Workloads in Google Kubernetes Engine
Web App Dev
Website on Google Cloud
Deploying Applications
Baseline: Deploy & Develop
Secure and Rate Limit API calls with API Gateway
Deploy and Manage Apigee X