

# Mia-Platform Courses Catalogue 2019

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# Introduction Courses

## Introduction to digital platforms

The laboratory *Introduction to digital platforms* is constituted by five modules and it is shaped to incrementally introduce participants to the current market, to digital innovations and to the main innovations that Mia-Platform brings into the company. In addition to the current market situation, the first part of the course will examine the following topics: the corporate environment, the information technology evolution and the theoretical background on product *envisioning*, agile organisation and high-quality coding. In the second part of the course, Mia-Platform product will be presented, focusing on its architecture and benefits, and then moving to the necessary implementation steps and the action plan to achieve the objectives that have been set.

- **Introduction to digital strategy in the company:** complexity, time to market, technical debt and IT asset;
- **Evolutionary architectures:** from monoliths to microservices and from on-premise to on-cloud;
- **Methods and tools:** product envisioning, agile organisation (Scrum and Kanban) , quality (TDD, DevOps);
- **Introduction to Mia-Platform:** architectural vision, the components, case history, evolutions;
- **Implementation strategy:** people growth, processes optimization, communication with clients, product transformation, benefits, action plan.

### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> System Architects <input checked="" type="checkbox"/> Business	30 people	-

## Mia-Platform and the challenge of the omnichannel context

Designing a service has become a matter of users and not only a matter of technology. Indeed, to create a complete service, it is crucial to understand final users'

needs and how they use the service leveraging several digital channels during their customer journey. Product vision laboratory in Mia-Platform enables to focus on the real value for clients.

- Design Thinking;
- Omnichannel Context;
- Unique Customer Journey for all the touchpoints.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> Business	16 people	-

## Courses for the Business area

### Product Envisioning Workshop

Starting from the customer journey analysis, the product envisioning workshop will enable to co-design a platform shaped on clients' needs. Therefore, the topics that will be examined are users' needs, internal processes and business logics.

The workshop will last for half a day and it will enable an effective brainstorming and a subsequent planning synthesis of the platform through tools that facilitate communication and ideas visualization.

- Product Vision;
- Personas and Customer Journey;
- Business Model Canvas.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
4h	<input type="checkbox"/> Development Team <input type="checkbox"/> System Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Mia-Platform Introduction to digital platforms</li> </ul> -

## Introduction to API CMS and User Monetization

The API CMS (Content Management System) is Mia-Platform tool for managing contents, for customers profiling and loyalty. During this course the Business area will have the opportunity to see all the potentialities of this tool so that it can be exploited as much as possible in the management planning.

This course will also focus on the basic tools included in Mia-Platform, that companies can leverage to optimize customers relationships: Push Notifications, Promo Code, One Click Payments and many others.

These are effective tools and it is crucial to understand all the different configurations, potentialities and feasible evolutions to exploit them as best as possible.

- API CMS: introduction and potentialities;
- User Monetization.

### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
2h	<input type="checkbox"/> Development Team <input type="checkbox"/> System Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Mia-Platform Introduction to digital platforms -</li> </ul>

## Data Monetization with Mia-Platform

This course will focus on Documentation potentialities. Indeed, having your own API and your services documented can open up new business scenarios. In this course Documentation potentialities will be deeply analysed, examining how Documentation can create new services and how it can monetize already existing services through new commercial agreements.

### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
2h	<input type="checkbox"/> Development Team <input type="checkbox"/> System Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Mia-Platform Introduction to digital platforms -</li> </ul>

## Introduction to Mia-Platform Analytics

This course about Analytics will provide the Business area with a route to leverage as best as possible all the tools furnished by Mia-Platform. The starting point will be an introduction to the analytics world: the importance of data, how to read them and how to take strategic data-driven decisions. Then, the Business area will discover Mia-Platform Analytics, the different data types that can be tracked and all the possible configurations that allow to have data shaped on sales needs.

- Introduction to the Analytics concept;
- Overview on Mia-Platform Analytics;
- Concrete examples.

### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
2h	<input type="checkbox"/> Development Team <input type="checkbox"/> System Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>● Mia-Platform - Introduction to digital platforms</li> </ul>

## Introduction to Mia-Platform Security

Security is nowadays one of the crucial themes that companies always need to monitor to be aligned to the latest legislative and technical measures. This course will debate all the main topics related to IT systems and connected to the best prevention and detection techniques. Finally, Mia-Platform’s answer will be presented, providing concrete examples.

- Introduction to the main problems related to IT systems security;
- Prevention and detection techniques;
- Introduction to Mia-Platform support.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
2h	<input type="checkbox"/> Development Team <input type="checkbox"/> System Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>Mia-Platform - Introduction to digital platforms</li> </ul>

### Introduction to Mia-Platform Privacy Manager

Data transparency and protection are one of the main challenges that companies nowadays have to face and IT systems will be the key players in this challenge. This course will debate all the problems and solutions related to privacy and data protection. Finally, Mia-Platform's answer will be presented, providing concrete examples.

- Introduction to main privacy problems;
- Prevention techniques;
- Introduction to Mia-Platform support.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
2h	<input type="checkbox"/> Development Team <input type="checkbox"/> System Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>Mia-Platform - Introduction to digital platforms</li> </ul>

### Mia-Platform and the organisational change

The introduction of a digital platform implies a radical change not only in the technology, but also in the organisation. How does a team change when a platform strategy is adopted? Which are its competences, how do they evolve over time? Knowing how to measure teams' competences is always more important. In this course we will see how to face this change.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> Systems Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Mia-Platform - Introduction to digital platforms</li> </ul>

## Courses for the Development Team

### Mia-Platform - Starter KIT

The course Mia-Platform - Starter Kit is shaped to get familiar with the main components of the platform. The general overview on Mia- Platform Suite describes the best practices to create and implement REST requests, to define the authorisations for each service, to develop high-quality documentation through the tools available for the platform.

- How does Mia-Platform operate and its configuration;
- How to create Crud with API Console;
- Set the authorisations to each service with API Console;
- Swagger and Documentation;
- Pre-Post Hook;
- Practical exercises during the entire laboratory.

Advanced level available too.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Mia-Platform - Introduction to digital platforms</li> <li>• Introduction to Git</li> <li>• DevOps with Docker</li> </ul>

## Develop a Custom Microservice Node with Mia-Platform

This course aims at empowering development teams in Microservices creation. In fact, Mia-Platform offers a template marketplace to accelerate development. This course will focus on Node template. Practical exercises will be done to deploy a functioning microservice within the platform ecosystem.

- Introduction to Custom Plugin concept;
- Interaction between custom services;
- Practical examples during the entire laboratory.

Advanced level available too.

Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>● Mia-Platform - Introduction to digital platforms</li> <li>● Mia-Platform - Starter KIT</li> <li>● Introduction to Git</li> <li>● DevOps with Docker</li> </ul>

## Security by Design with Mia-Platform

The Access Management e the Privacy Manager are two components of Mia-Platform that ensure the maximum security to the platform. This course will show to developers the following functionalities: Users Management, ACL Management and Privacy Manager Management. Developers will be engaged through cases and practical exercises with our API Console.

- Access Management;
- Users and Session Manager;
- ACL;
- Privacy Manager.



#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
½ day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> Systems Architects <input checked="" type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Mia-Platform - Introduction to digital platforms</li> </ul>

## Configure CMS, Analytics and User Monetization with the API Console

The components API CMS and Analytics of our platform are ideal tools to manage the corporate business. Thanks to this course, developers will be able to configure both tools with the API Console to rapidly and precisely answer to business area requests. In fact, CMS allows the entire configuration of the collections and of the contents. The Analytics configuration enables the business area to organize its data according to priorities.

Moreover, the components of User Monetization will be deeply analysed to understand the different configurations, potentialities and feasible evolutions to exploit them as best as possible. In the basic course developers will learn to configure them and will try to create their first interactions with clients.

- API CMS: how to configure collections, how to manage contents;
- Analytics: how to configure analytics, how to personalize dashboards;
- Push Notification, Prospect, Email Marketing, One Click Payments, Promo Codes, Member get Member.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Mia-Platform - Introduction to digital platforms</li> </ul>

## Introduction to Mia-Platform Documentation Portal

This course includes an introduction to the use of the Documentation Portal, that consists in an in-depth analysis about how to leverage documentation of Open API for TEST and for the implementation of new functionalities.

In the following course developers will experiment through exercises how to configure the component Swagger Aggregator and how to strengthen their services.

### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
½ day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

## Mia-Platform for Android, how to use SDK android

This course includes an introduction to the use of Software Development Kit Android available for the platform, in which all the features of the SDK android will be described. Moreover, the main integration provided by SDK will be examined and experimented during the course.

- Sync of data online-offline;
- Push notifications;
- Registration and User Login;
- News management;
- Development of a basic application.

Advanced level available too.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

### Mia-Platform for iOS, how to use SDK iOS

This course includes an introduction to the use of Software Development Kit iOS available for the platform, in which all the features of the SDK iOS will be described. Moreover, the main integration provided by SDK will be examined and experimented during the course.

- Sync of data online-offline;
- Push notifications;
- Registration and User Login;
- News management;
- Development of a basic application.

Advanced level available too.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

### Mia-Platform for Single Page Applications

In this course we will examine how to create Single Page Applications more rapidly thanks to Mia-Platform. The course will start with an introduction to the context of Single Page Applications and then it will analyse the React and Angular Templates proposed by Mia-Platform. Moreover, it will be debated how a platform can accelerate the development phase.

- Introduction to Single Page Applications;
- Template React;
- Template Angular.

Advanced level available too.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

## Courses for Development Team - DevOps

### Monitoring, Log Management and Alarms with Mia-Platform

Each developer can leverage application log to facilitate the debugging of his services and to monitor his platform; but as it happens for tests, writing log without following some kind of logic and/or without discipline can lead to coding that is not easy to analyse at runtime. This course will analyse how to write log and how to set alarms on your systems.

This course will also examine the techniques about systems monitoring, how to set metrics to effectively monitor systems and the tools to read them. The course includes practical exercises.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>• Introduction to Git</li> <li>• DevOps with Docker</li> <li>• Mia-Platform - Starter KIT</li> </ul>

## Testing Strategies with Mia-Platform

Test have an increasing importance in the development process. In this course it will be examined how to implement:

- Unitary test on your coding;
- TDD strategies;
- E2E test on your systems;
- Useful tools and instruments;
- Practical exercises.

Advanced level available too.

Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	<ul style="list-style-type: none"> <li>● Introduction to Git</li> <li>● DevOps with Docker</li> <li>● Mia-Platform - Starter KIT</li> <li>● Develop a Custom Microservice Node with Mia-Platform</li> </ul>

## Preparatory Courses on Technologies

### Introduction to Git - “the stupid content tracker”

This course will examine the basic principles to manage the source code, the versioning and the working flows with Git. This laboratory includes practical exercises.

- Introduction to basic commands with Git;
- Git functioning;
- Different Git Flows;
- How to use branch, tag, merge, merge request;
- Introduction to GitLab;
- Mia Git Flow, the flow to manage source code for Mia-Platform services.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

## Cx - Integration, Delivery and Deploy

This course will deeply analyse the following topics: management of the development and deploy cycle according to the principles and best practises of Continuous Integration and Continuous Deployment, exploiting as best as possible the available tools; definition of the best technological and organisational choices to ensure the proper systems reactivation; configuration of the platform within a Business Continuity Plan. This laboratory includes practical exercises with two main tools: GitLab and Jenkins.

- How to automate the entire development cycle;
- Jenkins Pipelines;
- GitLab Pipelines.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

## DevOps with Docker

This course will examine how to isolate the infrastructure of business application to enable a higher reliability and scalability:

- Introduction to DevOps process;

- Introduction to Docker.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input checked="" type="checkbox"/> Systems Architects <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

## Introduction to NoSQL with MongoDB

This course will examine the following topics:

- Understand MongoDB foundations in terms of basis and philosophy;
- Convert a database from Relational to Documents;
- Learn schema design concepts to create database on MongoDB;
- Learn the different types of query and operators.

#### Organizational information

Duration:	Beneficiaries:	Capacity:	Preparatory courses:
1 day	<input checked="" type="checkbox"/> Development Team <input type="checkbox"/> Sistemisti <input type="checkbox"/> Business	16 people / session  (it is better to have an even number to facilitate exercises in couples)	-

# Logistics Information for all the courses

## Room

- Room with a projector;
- Space for the participants and their computer;
- Internet access;
- Desired board with markers or flipchart.

## Participant Requirements

- One computer per participant;
- Installed Git which is ready-to-use (for Windows users, it is better to quickly read the [following article](#) to decide which options to abilitate during the installation phase.