



# NEW HORIZON COLLEGE OF ENGINEERING

Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC  
Accredited by NAAC with 'A' Grade, Accredited by NBA

## REPORT on HANDS-ON WORKSHOP

### DEPARTMENT OF MCA

(8<sup>th</sup> December 2025)

**Topic:** Workshop on Building a minimal APIs using .NET

**Date:** 8<sup>th</sup> December 2025

**Timing:** 09.00 AM-11 AM

**Programme Co-ordinator:**

Prof. Diksha Dhiman

Assistant Professor,

Department of MCA.

**Convenor:** Dr. V. Asha,

Professor and Head

Department of MCA

**No. of Participants:** 41 (III MCA C)

**Details of the Resource Persons:**

Mr. Tapan Dahal

Associate Software Engineer

Sysfore Technology Pvt Ltd, Bangalore


**Profile of the Expert**

Tapan Dahal is a committed and growth-oriented Computer Science professional specialising in building reliable, user-centered software solutions. He holds a Master of Computer Applications from New Horizon College of Engineering, Bengaluru, with strong academic performance.

His technical expertise spans Java, C, MySQL, Microsoft SQL Server, Spring Boot, .NET MVC, AngularJS, and cloud platforms such as AWS. He has gained practical industry experience through roles at Tripillar Solutions and Synergy Technologies, where he contributed to developing dynamic web applications, backend services, and real-time project modules using modern development tools including Azure DevOps, Git, and Linux.

Tapan has also worked on impactful academic projects, including a job portal designed for rural and semi-urban youth, demonstrating his ability to apply technology to address real-world challenges. Known for his adaptability, communication skills, and problem-solving ability, he brings a user-focused approach to every solution he builds.

## Poster



The poster features a blue background with a white geometric pattern. At the top, there are two logos: 'NEW HORIZON COLLEGE OF ENGINEERING' with a '25 YEARS OF GLOBAL LEARNING' anniversary logo, and the 'COMPUTER SOCIETY OF INDIA' logo. Below these is a white banner with the text 'Higher Education Talk'. The main title 'Building a Minimal API using .NET' is in large, bold, yellow font. To the left of the title, there are four icons with corresponding text: a calendar icon for '8<sup>th</sup> December 2025', a clock icon for '09:00 AM to 11:00 AM', a location pin icon for 'MCA Lab 1', and a group of people icon for '3<sup>rd</sup> Semester Students'. To the right of the title is a circular portrait of Mr. Tapan Dahal, a smiling man with dark hair. Below the portrait, his name 'Mr. Tapan Dahal' is written in bold yellow font, followed by his title 'Associate Software Engineer, Sysfore Technology Pvt Ltd' in a smaller white font.

**NEW HORIZON COLLEGE OF ENGINEERING**  
25 YEARS OF GLOBAL LEARNING

**COMPUTER SOCIETY OF INDIA**  
ESTD. 1965

**Higher Education Talk**

# Building a Minimal API using .NET

 **8<sup>th</sup> December 2025**

 **09:00 AM to 11:00 AM**

 **MCA Lab 1**

 **3<sup>rd</sup> Semester Students**



**Mr. Tapan Dahal**  
Associate Software Engineer,  
Sysfore Technology Pvt Ltd

Faculty Coordinator  
**Ms. Diksha Dhiman**  
Assistant Professor - MCA

Convenor  
**Dr. V Asha**  
Professor & HoD - MCA

Organised by  
**Department of Master of Computer Applications**

## Objective:

The objective of the session is :

- Introduce the fundamentals of Low-Code/No-Code development, enabling students to understand how rapid application building differs from traditional coding methods.
- Provide hands-on experience with the SKYÉ Low-Code Platform, allowing participants to design, build, and deploy functional web applications using visual components and workflow automation.

- Demonstrate real-time application development, from data modeling to interface creation.
- Encourage innovation through simplified software development, empowering students to convert ideas into working prototypes without extensive programming knowledge.

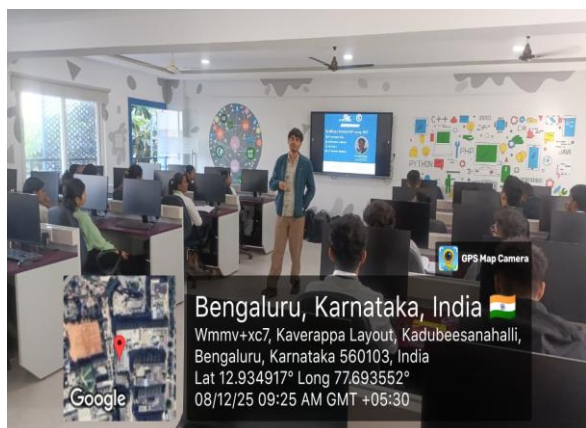
## Content

The workshop focused on explaining the fundamentals of Minimal APIs and how they differ from traditional controller-based API development in .NET. Participants were guided through setting up the development environment, creating and configuring endpoints, and understanding the roles of routing, dependency injection, and middleware in a Minimal API structure. The resource person demonstrated how to connect APIs to a database using Entity Framework Core, along with techniques for implementing validation, error handling, and basic security. A complete walkthrough of building a functional Minimal API project was provided, emphasising clean architecture, performance, and deployment considerations.

## Summary of Content

The expert provided a comprehensive walkthrough of Minimal APIs, beginning with their purpose and advantages in simplifying API development. Participants learned how to structure applications without controllers, define endpoints efficiently, and integrate essential features like routing, data access, and middleware. Through hands-on demonstrations, the resource person guided attendees in constructing a working API, highlighting real-world scenarios, troubleshooting techniques, and best practices. The session emphasised how Minimal APIs can accelerate development while maintaining code clarity and performance.

## Snapshot from the Session



## **Outcome**

By the end of the workshop, participants had developed a solid understanding of how Minimal APIs function within the .NET ecosystem. They became capable of creating and configuring Minimal API endpoints, integrating them with databases through Entity Framework Core, and applying key concepts such as dependency injection, middleware, and structured error handling. The hands-on experience boosted their confidence in building and running API-driven applications using .NET

Overall, the workshop enhanced their technical proficiency and prepared them to apply Minimal API development techniques in real-world projects.

## **Attendance**

List of MCA students attended



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New Horizon Knowledge Park, Ring Road, Marathalli  
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC  
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## DEPARTMENT OF MCA

AY 2025-26

## ATTENDANCE SHEET OF PARTICIPANTS

### WORKSHOP

### BUILDING A MINIMAL API USING .NET

RESOURCE PERSON: Mr. TAPAN DAHAL

ASSOCIATE SDE

SYSFORE TECHNOLOGY Pvt Ltd

DATE: 08-12-2025

TIME: 09:00 am to 11:00 am

PARTICIPANTS: STUDENTS SEM III

VENUE: MCA LAB-1

SERIAL NO	USN NO	NAME	SIGNATURES
01	INH24MC069	Madhushree GR	<i>Madhushree</i>
02	INH24MC057	Keerthana G.R	<i>Keerthana</i>
03	INH24MC029	Bhagavathi	<i>Bhagavathi</i>
04	INH24MC039	Dakshayani G.ond	<i>Dakshayani</i>
05	INH24MC019	Anuganti Samalhya	<i>A. Samalhya</i>
06	INH24MC033	Bindu Reddy C	<i>Bindu Reddy</i>
07	INH24MC020	Arpita Kumari	<i>Arpita</i>
08	INH24MC032	Shanyaam	<i>Shanyaam</i>
09	INH24MC043	Disha Day	<i>Disha</i>
10	INH24MC023	Ashwathy	<i>Ashwathy</i>
11	INH24MC005	Divya N. Shivaniggi	<i>Divya</i>



DATED: 08-12-2025

SERIAL NO	USN NO	NAME	SIGNATURES
12	INH24MC024	B. VANSHITHA	<i>Vanshitha</i>
13	INH24MC074	MEENAKSHI . J . H	<i>Meenakshi</i>
14	INH24MC090	Nikhitha . P	<i>Nikhitha</i>
15	INH24MC059	KARISHMA SINGH	<i>Kingh</i>
16	INH24MC085	Naymin . B	<i>S Naymin</i>
17	INH24MC089	Nikhitha G.S	<i>Nikhitha</i>
18	INH24MC097	Poorvi D.	<i>Poorvi</i>
19	INH24MC047	Gouri Tandel	<i>Randel</i>
20	INH24MC007	Aditya Singh	<i>Aditya Singh</i>
21	INH24MC025	Ayush Anand	<i>Ayush</i>
22	INH24MC021	Ashish Kumar	<i>Ashish</i>
23	INH24MC010	Akash Rawat	<i>Akash</i>
24	INH24MC082	Narendra Singh	<i>Narendra</i>
25	INH24MC051	Jayath Nair	<i>Jayath</i>
26	INH24MC004	Achyut	<i>Achyut</i>
27	INH24MC036	C . Jayanth	<i>C Jayanth</i>
28	INH24MC044	Dishanth Patel	<i>Dishanth</i>
29	INH24MC015	Amruth Kumar T.J	<i>Amruth</i>
30	INH24MC056	Ganesh R	<i>Ganesh</i>
31	INH24MC061	M. Pragnival	<i>pragnival</i>
32	INH24MC014	Zavi Shankar	<i>Zavi</i>
33	INH24MC087	Nikhish Mishra	<i>Nikhish</i>
34	INH24MC011	Santhosh Keshu	<i>Santhosh</i>

## WORKSHOP – Building a minimal API using .NET

DATED: 08-12-2025

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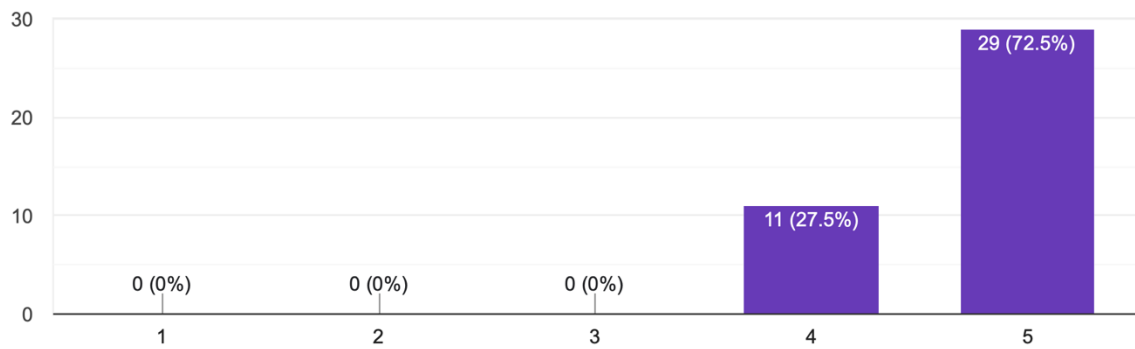
  
EVENT COORDINATOR

HOD MCA

## Feedback:

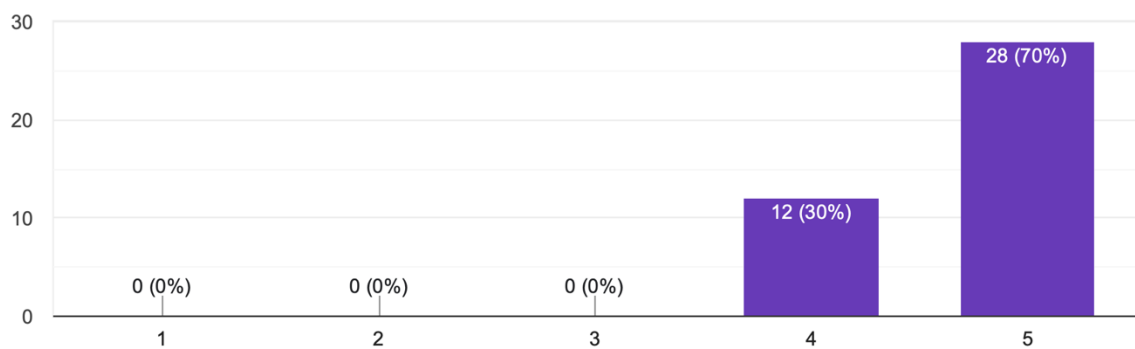
### Quality of the training content

40 responses



### Clarity of the presentation.

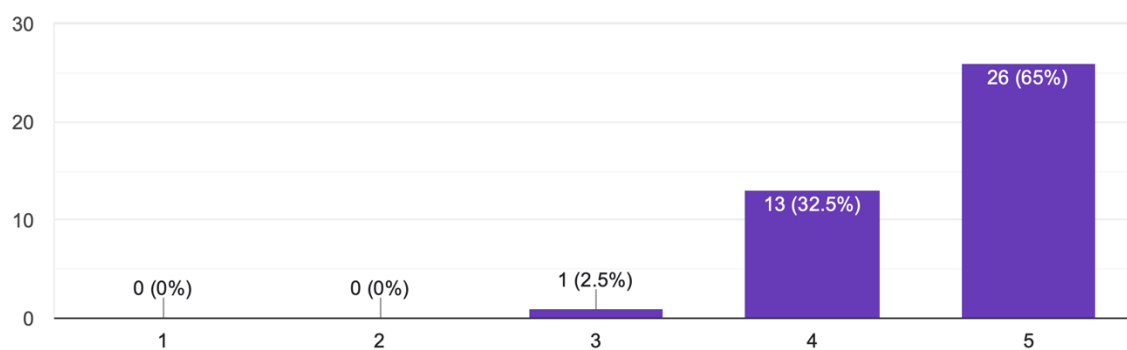
40 responses





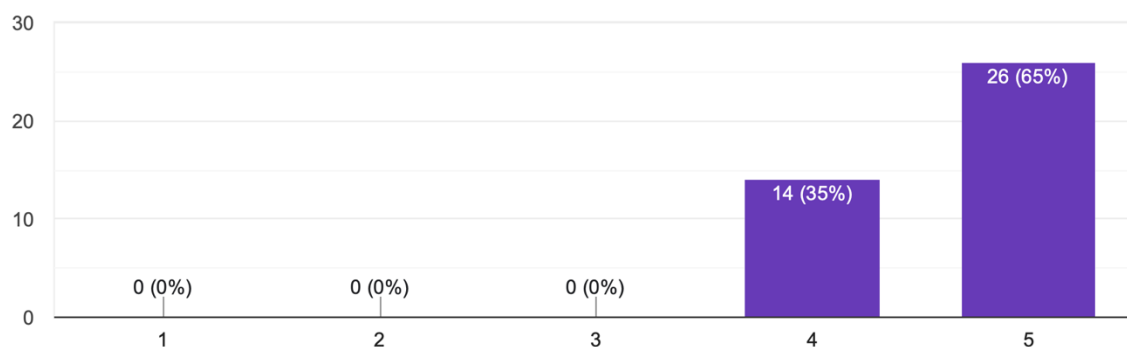
Effectiveness of the examples depicted during the session.

40 responses



Rate the relevance of the topic to future study and work.

40 responses



**Prof. Diksha Dhiman**  
**Faculty Coordinator**

**Dr. V. Asha**  
**Head of Department, MCA**