ARC LAB'S

Communicate. Collaborate. Create.

Coding Workshop details

Trainer	Trainer has 7+ years of experience in building "Coding" from scratch.	Team	
		Department: CODING	
		Point Person: Vamshi	
Bootcamp	• Workshop for 2 days • Workshop for 3 days • Workshop for 5 days	**Contact Details**	
		+91-9052454439 hello@arclabs.in techarclab@gmail.com	

Curriculum for 2 days workshop

Topic
Day 1

1. Introduction to Coding: Overview of coding and its importance in today's world.
2. Programming Concepts: Understanding basic programming concepts like variables, loops, and conditionals.
3. Block-Based Coding: Hands-on experience with block-based coding platforms such as Scratch or Blockily.

4. Creating Animations: Using coding to create interactive animations and storytelling projects.
5. Game Development: Introduction to game design principles and creating simple

Day 2

1. Introduction to Web Development: Understanding the basics of web development and HTML.
2. Building a Webpage: Hands-on experience in building a simple webpage using HTML and CSS.
3. Introduction to Python: Introduction to Python programming language and its syntax.
4. Coding Challenges: Engaging coding challenges to reinforce concepts and problem-solving skills.
5. Project Showcase: Presenting individual or group projects developed during the workshop.

Certification

Arc Lab certification	Certification will be provided by the company to individual students and also Merit certificate will be provided to those who performed well in the workshop
Ministry of education	Certification from the central govt will also be provided to add more value to the certificate

Curriculum for 3 days workshop

Topic

Day 1

1. Introduction to Coding: Importance of coding in today's world and its applications.
2. Scratch Programming: Basics of block-based coding using Scratch, creating animations and interactive stories.
3. Computational Thinking: Developing problem-solving skills and understanding algorithms and loops.
4. Game Development: Introduction to game design principles and creating simple games using Scratch.
5. Project Work: Hands-on project work to reinforce concepts and encourage creativity.

Day 2

1. Web Development Basics: Introduction to HTML and CSS for building web pages.
2. Web Development Project: Guided project to create a static website using HTML and CSS.
3. JavaScript Fundamentals: Introduction to JavaScript programming language and its applications.
4. Interactive Web Elements: Adding interactivity to web pages using JavaScript.
5. Project Work: Continuation of the web development project with interactive elements.

Day 3

1. Python Programming: Introduction to Python language, syntax, and basic programming concepts.
2. Python Projects: Hands-on projects using Python, such as creating a text-based adventure game or a simple calculator.
3. Data Structures and Algorithms: Introduction to data structures like lists and dictionaries, and algorithmic thinking.
4. Final Project: Collaborative project work where students apply their coding skills to create a unique program or game.
5. Project Showcase: Presenting individual or group projects developed during the workshop.

Certification

Arc Lab certification	Certification will be provided by the company to individual students and also Merti certificate will be provided to those who performed well in the workshop
Ministry of education	Certification from the central govt will also be provided to add more value to the certificate

Curriculum for 5 days workshop

Topic
Day 1

1. Introduction to Coding: Importance of coding and its applications in various fields.
2. Scratch Programming: Basics of block-based coding using Scratch, creating animations and interactive stories.
3. Computational Thinking: Developing problem-solving skills and understanding algorithms and loops.

4. Game Development: Introduction to game design principles and creating simple games using Scratch.

Day 2

1. Web Development Basics: Introduction to HTML and CSS for building web pages.
2. Web Development Project: Guided project to create a static website using HTML and CSS.
3. JavaScript Fundamentals: Introduction to JavaScript programming language and its applications.
4. Interactive Web Elements: Adding interactivity to web pages using JavaScript.
5. Project Work: Continuation of the web development project with interactive elements.

Day 3

1. PictoBlox Introduction: Introduction to PictoBlox, a graphical programming platform for robotics and IoT.
2. Robotics Basics: Understanding robotics concepts and controlling robots using PictoBlox.
3. IoT Fundamentals: Introduction to Internet of Things (IoT) and using PictoBlox for IoT projects.
4. Project Work: Hands-on project work involving robotics or IoT using PictoBlox.
5. Project Showcase: Presenting individual or group projects developed during the workshop.

Day 4

1. Python Programming: Introduction to Python language, syntax, and basic programming concepts.
2. Python Projects: Hands-on projects using Python, such as creating a text-based adventure game or a simple calculator.
3. Data Structures and Algorithms: Introduction to data structures like lists and dictionaries, and algorithmic thinking.
4. Project Work: Continuation of Python projects, exploring more advanced concepts and functionalities.
5. Project Showcase: Presenting individual or group projects developed during the workshop.

Day 5

1. App Development Basics: Introduction to mobile app development using a platform like MIT App Inventor.
2. App Development Project: Guided project to create a simple mobile app using App Inventor.
3. App Deployment: Understanding the process of deploying and testing mobile apps on devices.
4. Project Refinement: Enhancing and refining projects developed during the workshop.
5. Final Project Showcase: Presenting the final projects to peers, teachers, and parents.

Certification	
Arc Lab certification	Certification will be provided by the company to individual students and also Merit certificate will be provided to those who performed well in the workshop
Ministry of education	Certification from the central govt will also be provided to add more value to the certificate

NOTE: The syllabus can be customized based on the school's requirements, grade levels, and available resources. The inclusion of PictoBlox allows students to explore robotics and IoT, adding an interactive and hands-on element to the workshop. The workshop duration and topics can be adjusted to ensure a comprehensive and engaging learning experience.