NEXTGEN
ech-Fi Literacy

3-Week Summer Bootcamp Sylabus.

Bootcamp Overview:

This bootcamp is designed to equip high school leavers and college hopefuls with essential skills for the future. The program covers basic digital literacy, introductory programming in HTML, CSS, and JavaScript, design skills using Photoshop and Figma, financial literacy, strategic thinking through games like chess and Monopoly, and an introduction to generative AI and large language models (LLMs). The aim is to provide practical knowledge and skills that will be valuable in higher education and future careers.

Bootcamp Schedule:

- **Duration:** 3 weeks
- **Days:** Monday to Friday
- **Time:** 9:00 AM - 4:00 PM
- **Lunch Break:** 12:00 PM - 1:00 PM

Week 1: Basic Digital Literacy & Financial Literacy

Monday:

9:00 AM - 12:00 PM: Introduction to Digital Literacy
- Understanding computer hardware and software
- Navigating operating systems (Windows, macOS)
- Basic troubleshooting skills

1:00 PM - 4:00 PM: Internet Fundamentals
- Using browsers and search engines effectively
- Online safety and digital citizenship
- Understanding cloud storage and collaboration tools

Tuesday:

9:00 AM - 12:00 PM: Effective Communication Tools
- Setting up and using email accounts (Gmail, Outlook)
- Professional email etiquette
- Introduction to communication tools (Slack, Zoom, WhatsApp)

1:00 PM - 4:00 PM: Social Media Literacy
- Overview of major platforms (Facebook, Twitter, Instagram)
- Managing digital footprints and online reputation
- Leveraging social media for personal branding

Wednesday:

9:00 AM - 12:00 PM: Word Processing and Presentation Skills
- Creating and editing documents in Microsoft Word/Google Docs
- Creating impactful presentations with PowerPoint/Google Slides
- Design principles for presentations, adding multimedia and interactivity
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1:00 PM - 4:00 PM: Spreadsheet Skills
- Introduction to Microsoft Excel/Google Sheets
- Basic formulas and data organization
- Creating and interpreting charts and graphs

Thursday:

9:00 AM - 12:00 PM: Introduction to Financial Literacy and Personal Finance Management
- Understanding income, expenses, and budgeting
- Basics of saving and investing
- Creating a personal budget
- Tracking expenses and managing income
- Setting financial goals

1:00 PM - 4:00 PM:
- Credit and Loans
- Understanding credit scores and reports
- Different types of loans and their uses
- Strategies for managing and repaying debt

Friday:

9:00 AM - 12:00 PM: Chess Basics
- Introduction to chess rules and objectives
- Movement of pieces and basic strategies

1:00 PM - 4:00 PM: Monopoly Strategies
- Game setup and basic rules
- Financial lessons from Monopoly
- Developing winning strategies

Week 2: Programming 101 & Financial Literacy

Monday:

9:00 AM - 12:00 PM: Introduction to Programming Concepts
- Overview of programming languages and their uses
- Writing your first program
- Basic coding concepts (variables, loops, conditionals)

1:00 PM - 4:00 PM: HTML and CSS Basics
- Structure of a web page with HTML
- Styling web pages with CSS
- Creating a simple personal website

Tuesday:

9:00 AM - 12:00 PM: JavaScript Fundamentals
- Introduction to JavaScript syntax and basics
- Writing simple scripts to enhance web pages
- Integrating JavaScript with HTML/CSS

1:00 PM - 4:00 PM: Practical JavaScript Applications
- Handling events and user interactions
- Creating basic animations
- Developing a simple interactive web page

Wednesday:

9:00 AM - 12:00 PM: Advanced Financial Literacy
- Saving and investing strategies
- Understanding different investment options (stocks, bonds, mutual funds)
- Cryptocurrencies

1:00 PM - 4:00 PM: Managing Debt
- Types of debt and their implications
- Strategies for debt repayment and management
- Avoiding common debt traps

Thursday:

9:00 AM - 12:00 PM: Introduction to Financial Tools/Plannnig for the Future
- Using budgeting apps and tools
- Financial tracking and management software
- Exploring online investment platforms
- Setting long-term financial and personal goals
- Understanding career options and pathways
- Building a diversified skill set

1:00 PM - 4:00 PM: Advanced Chess/Monopoly Techniques
- Opening strategies and mid-game tactics
- Understanding endgame principles
- In-depth strategy and negotiation techniques in monopoly
- Managing properties and resources

- Financial decision-making within the game

Friday:

9:00 AM - 12:00 PM: Programming Project Day
- Group work on a simple project combining HTML, CSS, and JavaScript
- Code review and feedback sessions

1:00 PM - 4:00 PM: Financial Literacy Workshop
- Interactive financial planning exercises
- Real-life financial scenarios and problem-solving
- Q&A session

Week 3: Design (Photoshop & Figma) & Future Skills

Monday:

9:00 AM - 12:00 PM: Introduction to Photoshop
- Interface overview and basic tools
- Editing and creating images
- Basic photo retouching techniques

1:00 PM - 4:00 PM: Photoshop Practice
- Working with layers and masks
- Creating simple graphic design projects
- Hands-on exercises

Tuesday:

9:00 AM - 12:00 PM: Advanced Photoshop Techniques
- Using filters and effects
- Advanced photo manipulation
- Designing promotional materials and posters

1:00 PM - 4:00 PM: Introduction to Figma
- Interface overview and basic functions
- Creating your first design project in Figma

Wednesday:

9:00 AM - 12:00 PM: Figma Design Principles
Working with frames and components
Creating interactive prototypes
Collaboration features in Figma

1:00 PM - 4:00 PM: Figma Practice
- Designing a simple app interface
- Group project: collaborative design task

Thursday:

9:00 AM - 12:00 PM: Advanced Figma Techniques
- Building design systems and libraries
- Responsive design best practices
- User testing with Figma prototypes
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1:00 PM - 4:00 PM: Design Project Work
- Group work on a comprehensive design project
- Peer review and feedback sessions

Friday:

9:00 AM - 12:00 PM: Introduction to Generative AI and Large Language Models (LLMs)
- Understanding AI concepts and applications
- Overview of generative AI and its uses
- Introduction to large language models (e.g., GPT)

1:00 PM - 4:00 PM: Future Skills and Career Planning
- Exploring career options in technology and design
- Building a portfolio and personal brand
- Networking and professional development tips

Saturday:

9:00 AM - 12:00 PM: Final Project Preparation
- Refining and finalizing projects
- Presentation skills and techniques
- Peer and instructor feedback

1:00 PM - 4:00 PM: Final Project Presentation
- Presenting digital literacy projects
- Showcasing programming and design work
- Bootcamp Recap and Certification
- Review of all topics covered
- Q&A and feedback session
- Awarding certificates of completion