

Preparing for Entrepreneurship in IT

Essential Skills and Strategies for University Students

Nik Mohd Habibullah Bin Nik Mohd Nizam



Micro Semiconductor Sdn Bhd [902668 - W]

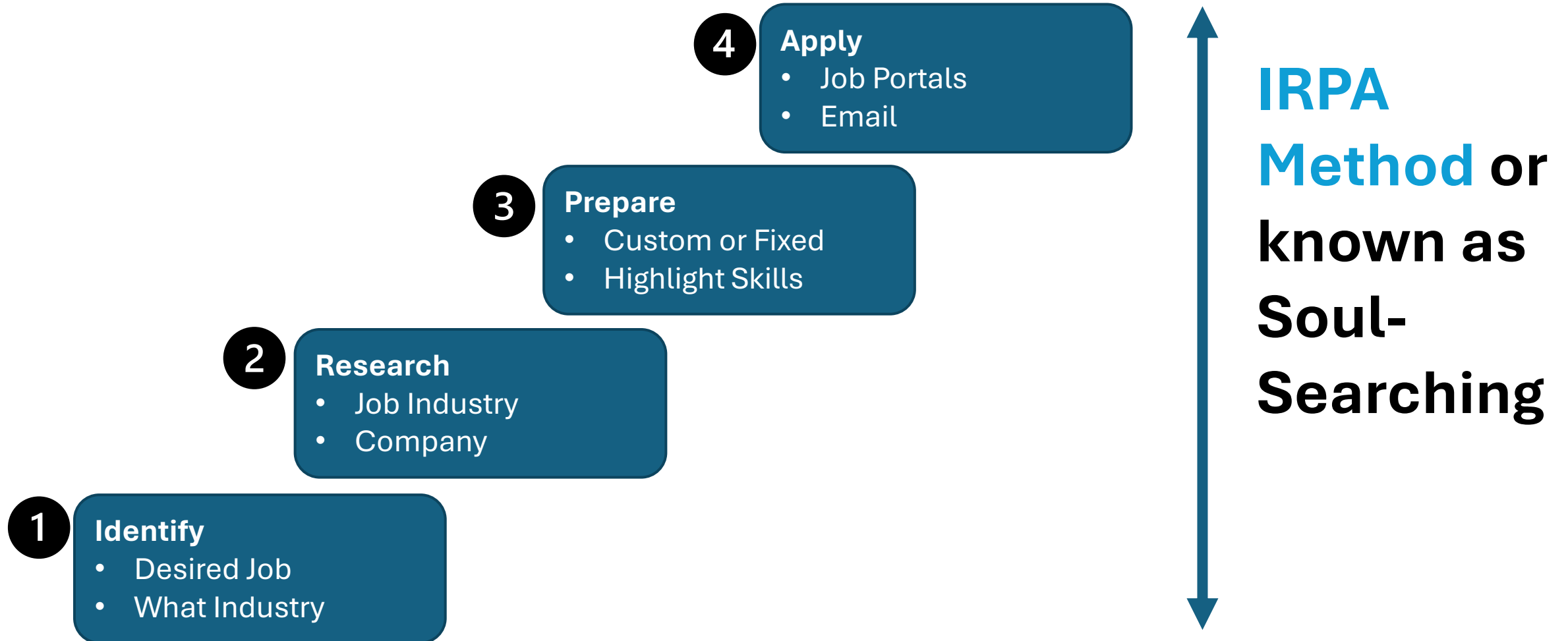


**GetMe
Hired**



Job Application Flow

Job Application Flow



Step 1: I stands for Identify

- Know your strength
- Spot your weakness
- Industry & type of jobs
- Reason for applying
- How do see yourself in the long run
- The relevancy of job with background
- Required skills & qualification
- Are you; money or career driven?

Why

To **refine** your choice

To dig deep your **interest** & needs

To reduce any **risks** of applying
for wrong job

To **align** your career proposition

Step 2: R stands for Research

- Sustainability of the job & industry
- Career growth & progression
- Financial stability of the company
- Culture & environment
- Small or big company?
- Review of the company
- Competitiveness of the market
- Opportunity available

Why

To **avoid** any “red-flags”

To have a **fulfilling**
career journey

To **align** our career goals
with company’s

Essential **step** for interview

Step 3: **P** stands for **Prepare**

CV / Resume

- Basic Information; Name, Number etc
- Education
- Professional Certification (if any)
- Work Experience with Achievements
- Skills (Hard Skills; i.e., Word, C++)
- International Involvements
- Co-Q Achievements
- Training & Courses (if any)
- Extracurricular Activities

Portfolio

- Works as CV; to showcase your ability through past projects/deliverables
- Must be documented whether in PDF, website or hard copy
- PDF: to be attached with CV
- Website: link to be included in the CV
- Hardcopy: to be documented in a
- neat manner & accordingly (by year or dimension)

Bonus

Recommendation letter

Step 4: A stands for Apply

Job Portals

LinkedIn

Jobstreet

Graduan

Indeed

Gradmalaysia

Glassdoor

Hiredly

Adnexio

Self-employed or Salaried

Aspect (Aspek)	Self-Employed (Bekerja Sendiri)	Salaried Employment (Pekerjaan Bergaji)
Income (Pendapatan)	Potentially higher, but variable and uncertain. (Berpotensi lebih tinggi, tetapi berubah-ubah dan tidak menentu.)	Stable and predictable monthly salary. (Pendapatan bulanan yang stabil dan boleh dijangka.)
Job Security (Jaminan Pekerjaan)	Dependent on market demand, personal effort, and business performance. (Bergantung pada permintaan pasaran, usaha peribadi, dan prestasi perniagaan.)	Higher security with employment contracts and benefits. (Lebih terjamin dengan kontrak pekerjaan dan faedah.)
Working Hours (Waktu Bekerja)	Flexible but often longer, especially in the startup phase. (Fleksibel tetapi sering lebih lama, terutamanya dalam fasa permulaan.)	Fixed hours as per company policy, typically 9-to-5. (Waktu tetap mengikut polisi syarikat, biasanya 9 hingga 5.)
Control and Independence (Kawalan dan Kebebasan)	Full control over decisions and work processes. (Kawalan penuh ke atas keputusan dan proses kerja.)	Limited autonomy; decisions made by higher management. (Kebebasan terhad; keputusan dibuat oleh pengurusan atasan.)
Career Growth (Pertumbuhan Kerjaya)	Unlimited growth potential but requires self-motivation and risk-taking. (Potensi pertumbuhan tanpa had tetapi memerlukan motivasi diri dan keberanian mengambil risiko.)	Clear career path and structured promotions within the company. (Jalur kerjaya yang jelas dan promosi yang berstruktur dalam syarikat.)
Financial Benefits (Faedah Kewangan)	No fixed benefits; must arrange personal EPF, SOCSO, and insurance. (Tiada faedah tetap; perlu mengurus EPF, SOCSO, dan insurans peribadi.)	Includes EPF, SOCSO, medical insurance, bonuses, and paid leave. (Termasuk EPF, SOCSO, insurans perubatan, bonus, dan cuti bergaji.)
Risk (Risiko)	High personal financial and business risks, especially in uncertain economic climates. (Risiko kewangan dan perniagaan peribadi yang tinggi, terutamanya dalam keadaan ekonomi tidak menentu.)	Lower risk as salary is guaranteed (except in cases of retrenchment). (Risiko lebih rendah kerana gaji dijamin (kecuali dalam kes pemberhentian kerja).)
Taxation (Percukaian)	Need to manage business taxes (e.g., income tax, SST) and file returns independently. (Perlu mengurus cukai perniagaan seperti cukai pendapatan dan SST secara sendiri.)	Employers handle tax deductions via PCB (Potongan Cukai Bulanan). (Majikan mengurus potongan cukai melalui PCB.)
Work-Life Balance (Keseimbangan Kerja dan Kehidupan)	Can choose working hours but may blur lines between personal and professional life. (Boleh memilih waktu kerja tetapi mungkin mengaburkan sempadan antara kehidupan peribadi dan profesional.)	More structured, allowing for better separation of work and personal time. (Lebih berstruktur, membolehkan pemisahan yang lebih baik antara kerja dan masa peribadi.)
Opportunities for Innovation (Peluang untuk Inovasi)	High; can create and execute innovative ideas freely. (Tinggi; boleh mencipta dan melaksanakan idea inovatif dengan bebas.)	Limited; must align with company policies and goals. (Terhad; mesti selaras dengan dasar dan matlamat syarikat.)
Stability in Tough Times (Kestabilan dalam Masa Sukar)	Income fluctuates with economic conditions; self-responsibility for finding clients/projects. (Pendapatan berubah mengikut keadaan ekonomi; tanggungjawab sendiri untuk mencari pelanggan/projek.)	Salaries may continue even during economic downturns (subject to company health). (Gaji mungkin diteruskan walaupun semasa kemelesetan ekonomi (bergantung kepada kesihatan syarikat).)
Social Perception (Persepsi Sosial)	Seen as independent and entrepreneurial; valued in business communities. (Dilihat sebagai berdikari dan berjiwa keusahawanan; dihargai dalam komuniti perniagaan.)	Viewed as more stable and traditional; respected in conventional employment settings. (Dilihat lebih stabil dan tradisional; dihormati dalam persekitaran pekerjaan konvensional.)

How Does a Business Brain Get Started? (Market Research)

What do you want to sell?

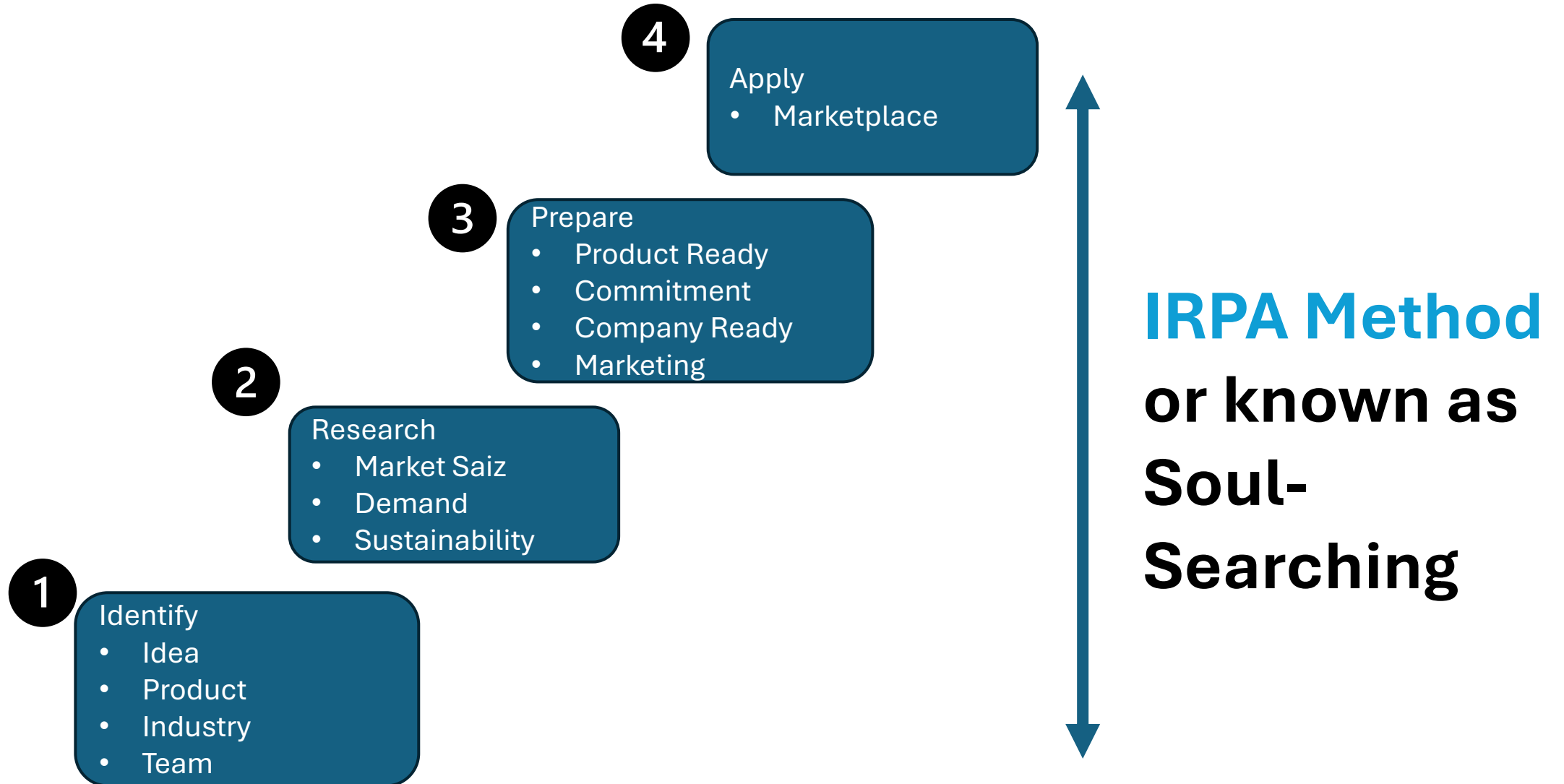
- Services / Product

Service / Product

- Market Saiz : Kind of industry (Medical, Education, Agriculture, Transportation)
- Demand (Kind of technology)
- Saluran (Network, MTDC, University, Mass Market (Public))
- Timeline : Development, Providing, Producing
- Sustainability
- Financial
- Risk

Business Application Flow

Business Application Flow



Company Setup

SSM – Suruhanjaya Syarikat Malaysia

MOF – Ministry of Finance

Secretary Company & Financial Audit

LHD – Lembaga Hasil Dalam Negeri

Bank

Type of Company (Sdn
Bhd | Interprise | LLT)

Structure in Business (Company)

Role (Peranan)	Description (Penerangan)
Chief Executive Officer (CEO)	Oversees overall business operations and strategy. (Mengawasi keseluruhan operasi dan strategi perniagaan.)
Chief Technology Officer (CTO)	Leads technological direction and R&D. (Memimpin arah teknologi dan penyelidikan & pembangunan.)
Chief Operating Officer (COO)	Manages daily operations and ensures efficiency. (Mengurus operasi harian dan memastikan kecekapan.)
Chief Information Officer (CIO)	Focuses on IT systems and alignment with business goals. (Memfokuskan pada sistem IT dan penajajaran dengan matlamat perniagaan.)
Software Developer/Engineer	Develops, tests, and maintains software. (Membangun, menguji, dan menyelenggara perisian.)
System Administrator (SysAdmin)	Manages IT infrastructure, ensuring reliability. (Mengurus infrastruktur IT dan memastikan kebolehpercayaan.)
Data Scientist/Analyst	Analyzes data for business insights. (Menganalisis data untuk mendapatkan pandangan perniagaan.)
Cybersecurity Specialist	Protects systems from cyber threats. (Melindungi sistem daripada ancaman siber.)
Cloud Engineer	Manages cloud infrastructure and scalability. (Mengurus infrastruktur awan dan skalabiliti.)
UI/UX Designer	Designs user-friendly and appealing interfaces. (Mereka bentuk antara muka yang mesra pengguna dan menarik.)
Product Manager	Defines product vision and strategy. (Mentakrifkan visi dan strategi produk.)
Project Manager	Plans and oversees IT projects. (Merancang dan mengawasi projek IT.)
Business Analyst	Identifies business needs and IT solutions. (Mengenal pasti keperluan perniagaan dan penyelesaian IT.)
Sales Executive/Manager	Promotes IT products and services. (Mempromosikan produk dan perkhidmatan IT.)
Digital Marketing Specialist	Executes online marketing campaigns. (Melaksanakan kempen pemasaran dalam talian.)
Customer Support Manager	Ensures customer satisfaction and support. (Memastikan kepuasan pelanggan dan memberikan sokongan.)
HR Manager	Recruits and manages employee performance. (Merekrut dan mengurus prestasi pekerja.)
Finance Manager/Accountant	Manages budgets, payroll, and compliance. (Mengurus belanjawan, gaji, dan pematuhan.)
Legal Advisor	Handles contracts and ensures legal compliance. (Mengurus kontrak dan memastikan pematuhan undang-undang.)
DevOps Engineer	Automates deployment pipelines and optimizes systems. (Mengautomasi saluran penyebaran dan mengoptimumkan sistem.)

Important Terms for IT Roles

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Category	Important Terms
Programmer / System Development	<p>Algorithms - Logical steps for solving a problem.</p> <p>Data Structures - Ways to organize and store data (e.g., arrays, lists, trees).</p> <p>API (Application Programming Interface) - Interfaces that enable systems to communicate.</p> <p>Object-Oriented Programming (OOP) - Concept of classes and objects.</p> <p>IDE (Integrated Development Environment) - Tools like VS Code, Eclipse.</p> <p>Debugging - Identifying and fixing issues in code.</p> <p>Version Control - Git, GitHub, GitLab.</p> <p>Frameworks and Libraries - Predefined code to accelerate development (e.g., React, .NET, Django).</p> <p>Testing - Unit Testing, Integration Testing.</p> <p>Agile Development - Iterative development method.</p> <p>DevOps - Integration of development and operations processes.</p> <p>Continuous Integration / Deployment (CI/CD) - Automation pipelines.</p>

Important Terms for IT Roles

Category	Important Terms
System Network and Security	<p>Firewall - Network security system to monitor traffic.</p> <p>Encryption - Protecting data by encoding it.</p> <p>Authentication - Verifying user identity (e.g., 2FA, MFA).</p> <p>VPN (Virtual Private Network) - Secures remote connections.</p> <p>Intrusion Detection System (IDS) - Monitors malicious activities.</p> <p>Penetration Testing - Simulated attacks to test system security.</p> <p>Cybersecurity - Protecting systems, networks, and data.</p> <p>Network Protocols - Rules for data communication (e.g., TCP/IP, HTTP, FTP).</p> <p>SSL/TLS - Security for web communications.</p> <p>Zero Trust Architecture - No implicit trust; verification at every step.</p>

Important Terms for IT Roles

Category	Important Terms
System Analyst	<p>Requirements Gathering - Identifying system and user needs.</p> <p>Feasibility Study - Assessing technical, economic, and operational feasibility.</p> <p>Use Case Diagram - Visualizing system interactions.</p> <p>Business Process Modeling - Mapping processes to improve workflow.</p> <p>Gap Analysis - Identifying discrepancies between current and desired states.</p> <p>System Design Document - Blueprint for system requirements.</p> <p>UML (Unified Modeling Language) - Standard for system design and documentation.</p> <p>Data Flow Diagram (DFD) - Mapping system data processes.</p> <p>Stakeholder Analysis - Understanding stakeholder needs.</p> <p>Prototyping - Early system models for user feedback.</p>

Important Terms for IT Roles

Category	Important Terms
Project Manager	<p>Scope Management - Defining the project goals and boundaries.</p> <p>Gantt Chart - Visual timeline of project tasks.</p> <p>Work Breakdown Structure (WBS) - Decomposing tasks into manageable parts.</p> <p>Risk Management - Identifying and mitigating project risks.</p> <p>Agile / Scrum - Framework for iterative development.</p> <p>Milestones - Key project deliverables.</p> <p>Budgeting - Estimating and tracking project costs.</p> <p>Resource Allocation - Managing project personnel and tools.</p> <p>Critical Path Method (CPM) - Identifying key project dependencies.</p> <p>KPI (Key Performance Indicators) - Metrics for project success.</p>

Important Terms for IT Roles

Category	Important Terms
Graphic Designer	<p>Typography - The art of arranging type to make written content appealing.</p> <p>Color Theory - Understanding color combinations and their psychological impact.</p> <p>Brand Identity - Visual representation of a company's identity (logo, colors, style).</p> <p>Adobe Creative Suite - Tools like Photoshop, Illustrator, and InDesign.</p> <p>Layout Design - Arranging visual elements for readability and impact.</p> <p>UI/UX Design - Focus on user interface and user experience.</p> <p>Vector and Raster Graphics - Types of graphic formats for design.</p> <p>Mockups and Prototypes - Visual representations of designs.</p> <p>Resolution and DPI - Image quality considerations.</p> <p>Design Principles - Concepts like contrast, balance, alignment, and repetition.</p>

Important Terms for IT Roles

Category	Important Terms
Web Designer	<p>HTML (HyperText Markup Language) - Structuring web pages.</p> <p>CSS (Cascading Style Sheets) - Styling web content.</p> <p>Responsive Design - Adapting layouts for different screen sizes.</p> <p>JavaScript - Adding interactivity to web pages.</p> <p>Wireframing - Creating basic layouts for websites.</p> <p>CMS (Content Management System) - Platforms like WordPress or Joomla.</p> <p>SEO (Search Engine Optimization) - Optimizing websites for search engines.</p> <p>Web Accessibility - Ensuring web content is usable by everyone.</p> <p>UI/UX Design - Enhancing usability and user experience.</p> <p>Cross-Browser Compatibility - Ensuring sites work on all browsers.</p>

Important Terms for IT Roles

Category	Important Terms
Mobile Application Development	<p>Native Apps - Apps developed specifically for a platform (iOS, Android).</p> <p>Cross-Platform Development - Building apps for multiple platforms (e.g., Flutter, React Native).</p> <p>APIs - Interfaces for integrating backend services.</p> <p>UI/UX Design - Optimizing interface and user experience for mobile devices.</p> <p>App Store Guidelines - Compliance for publishing on app stores.</p> <p>Performance Optimization - Ensuring apps are efficient and fast.</p> <p>Mobile Databases - Databases like SQLite and Realm.</p> <p>Push Notifications - Sending real-time alerts to users.</p> <p>Mobile Security - Protecting apps against vulnerabilities.</p> <p>Backend Integration - Connecting apps to server-side resources.</p>

Important Tools and Software

Important Tools and Software

Category	Tools and Software
Programmer / System Development	Visual Studio Code - Lightweight code editor. Git & GitHub - Version control and collaboration. IntelliJ IDEA - IDE for Java development. PyCharm - IDE for Python development. Docker - Containerization platform. Jenkins - Continuous Integration/Deployment tool. Postman - API testing tool. Eclipse - Open-source IDE. Notepad++ - Lightweight text editor. Jira - Task management tool.

Important Tools and Software

Category	Tools and Software
System Network and Security	<p>Wireshark - Network packet analysis.</p> <p>Nmap - Network scanning tool.</p> <p>Kali Linux - Penetration testing platform.</p> <p>Metasploit - Penetration testing framework.</p> <p>Snort - Intrusion detection system.</p> <p>Cisco Packet Tracer - Network simulation tool.</p> <p>OpenSSL - Cryptographic library.</p> <p>Burp Suite - Web vulnerability scanner.</p> <p>pfSense - Firewall and router software.</p> <p>Splunk - Security information and event management (SIEM).</p>

Important Tools and Software

Category	Tools and Software
System Analyst	<p>Lucidchart - Diagramming and visualization tool.</p> <p>Microsoft Visio - Visual process and system modeling.</p> <p>Balsamiq Mockups - Prototyping software.</p> <p>Jira - Requirement and task management.</p> <p>Trello - Visual project management tool.</p> <p>IBM Rational Rose - UML modeling tool.</p> <p>Asana - Task tracking and collaboration.</p> <p>Google Workspace - Document collaboration tools.</p> <p>SmartDraw - Flowchart and DFD creator.</p> <p>Bizagi - Business process modeling software.</p>

Important Tools and Software

Category	Tools and Software
Project Manager	<p>Microsoft Project - Project scheduling tool.</p> <p>Trello - Kanban-style project management.</p> <p>Asana - Project tracking software.</p> <p>Jira - Agile project management tool.</p> <p>Monday.com - Visual task management platform.</p> <p>Basecamp - Collaboration and communication platform.</p> <p>Smartsheet - Online project planning.</p> <p>Wrike - Work management software.</p> <p>ClickUp - Task and time management.</p> <p>GanttPRO - Gantt chart project planning.</p>

Important Tools and Software

Category	Tools and Software
Graphic Designer	<p>Adobe Photoshop - Image editing software.</p> <p>Adobe Illustrator - Vector graphics editor.</p> <p>CorelDRAW - Vector illustration software.</p> <p>Figma - Collaborative design tool.</p> <p>Canva - Easy graphic design tool.</p> <p>Sketch - UI/UX design platform.</p> <p>Affinity Designer - Alternative vector tool.</p> <p>Procreate - Digital illustration software.</p> <p>InDesign - Desktop publishing software.</p> <p>GIMP - Open-source image editor.</p>

Important Tools and Software

Category	Tools and Software
Web Designer	<p>Adobe XD - Web design and prototyping tool.</p> <p>Figma - Design and collaboration platform.</p> <p>Sketch - UI/UX web design tool.</p> <p>WordPress - Content Management System (CMS).</p> <p>Bootstrap - Front-end framework.</p> <p>Google Web Designer - HTML5 ad design tool.</p> <p>Visual Studio Code - Web development editor.</p> <p>Sublime Text - Lightweight code editor.</p> <p>Wix - Website builder platform.</p> <p>Zeplin - Collaboration for design handoff.</p>

Important Tools and Software

Category	Tools and Software
Mobile Application Development	<p>Android Studio - IDE for Android apps.</p> <p>Xcode - IDE for iOS apps.</p> <p>Flutter - Cross-platform development framework.</p> <p>React Native - JavaScript-based mobile framework.</p> <p>Swift - Programming language for iOS.</p> <p>Kotlin - Programming language for Android.</p> <p>Firebase - Backend-as-a-service platform.</p> <p>Appgyver - Low-code app development tool.</p> <p>Unity - Game and app development platform.</p> <p>Expo - React Native app toolchain.</p>