|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Web 1.0** | **Web 2.0** | **Web 3.0** | **Web 4.0** | **Web 5.0** |
| **Time Period** | Early 1990s - Early 2000s | Early 2000s - Late 2010s | Late 2010s - Present | Emerging | Future |
| **Content Type** | Static | Dynamic | Semantic and AI-driven | Personalized and predictive | Fully immersive and adaptive |
| **User Interaction** | Read-only | Read-write and collaboration | Intelligent interaction with content | Intelligent interaction across devices | Human-centered AI interaction |
| **Technology Used** | HTML, CSS | JavaScript, AJAX, XML, APIs | AI, Machine Learning, Blockchain | IoT, Advanced AI | Neural Interfaces, AI, XR |
| **Example Platforms** | GeoCities, Static websites | Facebook, YouTube, Wikipedia | Decentralized Apps (DApps), ChatGPT | Smart Assistants, Smart Homes | Fully immersive AR/VR environments |
| **Security Concerns** | Phishing, Vulnerable authentication | Cross-Site Scripting (XSS), CSRF | Data privacy, Blockchain manipulation | Device hijacking, pervasive surveillance | Ethical misuse of AI, psychological attacks |
| **Attacks** | Defacement, Clickjacking | XSS, CSRF, SQL Injection | Cryptojacking, Deepfakes | Device Hijacking, Side-Channel Attacks | AI-generated manipulations |