# NEWSFLOW 📰 NewsFlow - Dynamic News Website

A modern, responsive news website that fetches and displays the latest articles from real RSS feeds and weather data. Built with vanilla HTML, CSS, and JavaScript for optimal performance and easy deployment.

## 🌟 Features

### Core Functionality

* **Real-Time News**: Fetches live news from BBC, Bloomberg, O'Reilly, and other trusted sources
* **Category Filtering**: Browse news by Technology, Business, Sports, Health, Science, Entertainment
* **Live Search**: Real-time search through articles with instant results
* **Responsive Design**: Works perfectly on desktop, tablet, and mobile devices

### Unique Features

* **🌙 Dark/Light Mode**: Professional theme switching with smooth transitions
* **⭐ Bookmark System**: Save favorite articles with persistent local storage
* **🌤️ Live Weather**: Real-time weather data for Rawalpindi, Pakistan
* **📈 Trending Sidebar**: Quick access to popular topics and categories
* **💫 Smooth Animations**: Modern UI with hover effects and fade-in transitions
* **🔄 Auto-Refresh**: One-click news refresh with animated loading states

### Daily Use Features

* **🔍 Instant Search**: Type-to-search with debounced input for better performance
* **📱 Mobile-First Design**: Optimized touch interface for mobile users
* **💾 Persistent Preferences**: Remembers your theme and bookmarked articles
* **⚡ Fast Loading**: Optimized with lazy loading images and efficient rendering
* **🎨 Glass-morphism UI**: Modern design with backdrop blur effects

## 🛠️ Technology Stack

* **HTML5**: Semantic structure with modern elements
* **CSS3**:
  + CSS Grid & Flexbox for responsive layouts
  + Custom CSS properties for theming
  + Smooth animations and transitions
  + Glass-morphism effects with backdrop-filter
* **Vanilla JavaScript**:
  + ES6+ features (async/await, classes, modules)
  + Fetch API for data retrieval
  + Local Storage for persistence
  + Event delegation and debouncing
  + debouncing

## 📡 API Integration

### News Sources

The website uses RSS2JSON API to fetch news from:

* **BBC News** (General News)
* **O'Reilly Radar** (Technology)
* **Bloomberg Markets** (Business)
* **BBC Sport** (Sports)
* **CNN Health** (Health)
* **National Geographic** (Science)
* **Variety** (Entertainment)

### Weather Data

* **Open-Meteo API**: Free weather service with no API key required
* **Real-time data** for Rawalpindi, Pakistan
* **CORS-enabled** for direct browser requests

### Why These APIs?

* ✅ **No API keys required** for most endpoints
* ✅ **CORS-enabled** for browser requests
* ✅ **Free forever** with generous rate limits
* ✅ **Reliable sources** from established news organizations