

# News Aggregation and Monetization Website Guide

## Step 1: Setting Up the Project

### 1. Install Required Tools:

- Install Node.js (<https://nodejs.org/>).
- Install a code editor like Visual Studio Code (<https://code.visualstudio.com/>).
- Install MySQL and set up a local instance (e.g., XAMPP (<https://www.apachefriends.org/>)).

### 2. Initialize the Project:

```
mkdir NewsAggregationWebsite
cd NewsAggregationWebsite
npm init -y
```

This creates a package.json file.

### 3. Install Required Node.js Packages:

```
npm install express mysql2 dotenv axios cors
```

### 4. Set Up Project Structure:

```
NewsAggregationWebsite/
├── backend/
│   ├── app.js
│   ├── routes/
│   │   ├── news.js
│   │   └── controllers/
│   │       ├── newsController.js
│   │       └── config/
│   │           ├── db.js
│   └── frontend/
│       ├── index.html
│       ├── css/
│       │   ├── styles.css
│       └── js/
│           └── script.js
├── .env
└── README.md
```

## Step 2: Backend Development

### 1. Database Configuration:

- Create a database named news\_website in MySQL.
- Create tables:

```
CREATE TABLE articles (
  id INT AUTO_INCREMENT PRIMARY KEY,
  title VARCHAR(255),
  description TEXT,
  url VARCHAR(255),
  category VARCHAR(50),
  published_at DATETIME
);
```
- Configure the database connection in backend/config/db.js

### 2. News API Integration:

- Fetch articles from News API using Axios.
- See backend/controllers/newsController.js code in the chat above.

### 3. Express Routes:

- Set up routes in backend/routes/news.js.
- Add route to app.js.

### Step 3: Frontend Development

#### 1. HTML Structure:

- Create frontend/index.html.

#### 2. CSS Styling:

- Create frontend/css/styles.css.

#### 3. JavaScript for Frontend:

- Create frontend/js/script.js.

### Step 4: Testing and Deployment

#### 1. Test Locally:

- Start the backend: node backend/app.js.
- Open frontend/index.html in a browser.

#### 2. Deploy the Backend:

- Use Heroku or Vercel.

#### 3. Deploy Frontend:

- Use Netlify or GitHub Pages.

### Step 5: Integrate Ads and Analytics

- Add Google AdSense code to index.html.
- Use Google Analytics for monitoring traffic.