



# NextStep Navigator – Career Passport

*"Your Guide to the Future"*

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## Acknowledgment

We, the project team “**Yemen Developers**”, proudly present our work on “**NextStep Navigator – Career Passport**”. We would like to express our sincere gratitude to all those who guided and supported us during the development of this project.

First and foremost, our deepest thanks go to **our instructor and mentor**, whose encouragement, advice, and feedback were invaluable in helping us shape this project into its final form. Their expertise inspired us to approach the work with both technical accuracy and creativity.

We are also thankful to **our institution**, which provided us with the opportunity and resources to carry out this project. The supportive environment and access to learning materials made it possible for us to put theory into practice.

Special appreciation goes to the members of our team, **Yemen Developers**, for their collaboration, dedication, and teamwork. Each member contributed unique strengths in research, design, coding, and testing, which together led to the successful completion of this project.

Finally, we extend our heartfelt gratitude to our families and friends for their patience, motivation, and continuous support throughout this journey.

This project has been a great learning experience, and as **Yemen Developers**, we are confident that the skills and knowledge we gained will guide us toward future success.

# **Abstract**

The rapid growth of educational opportunities and career choices has created confusion for students, graduates, and professionals who often struggle to identify the most suitable career path. Despite the abundance of information available online, there is a lack of structured, simple, and user-friendly platforms that can guide individuals in making informed career decisions at the right time.

To address this challenge, our team, **Yemen Developers**, designed and developed **“NextStep Navigator – Career Passport”**, a fully responsive and static web-based platform for career exploration and guidance. The project leverages **HTML5, CSS3, JavaScript, Bootstrap, and JSON** to provide an interactive, visually engaging, and accessible solution without the need for complex back-end systems.

The website offers multiple features tailored to different user segments, including **students, graduates, and working professionals**. Key functionalities include:

- A **Career Bank** with filterable and sortable profiles.
- An **Interest-Based Quiz** that provides personalized recommendations.
- A **Multimedia Guidance Section** featuring videos and podcasts.
- A **Resource Library** with articles, eBooks, and guides.
- **Success Stories** showcasing motivational career journeys.
- **Admissions & Coaching** tips such as resume guidelines, interview preparation, and study abroad advice.
- Additional sections like **Feedback, Contact Us, and About Us**, ensuring a complete and professional portal.

The platform is lightweight, fast, and compatible across devices, making it suitable for academic institutions, career fairs, and self-learning environments. By focusing on static data management using JSON, the site is easy to deploy even in low-infrastructure areas.

Through this project, we aimed not only to meet the academic requirements but also to create a practical tool that demonstrates our technical knowledge, teamwork, and problem-solving skills. We believe that **NextStep Navigator** represents a step forward in bridging the gap between career uncertainty and informed decision-making.

# **Chapter 1: Problem Definition & Background**

## **1.1 Background**

In today's educational and professional landscape, individuals are confronted with an overwhelming variety of career choices, academic pathways, and skill development opportunities. While the internet offers an abundance of information, it is often **fragmented, unorganized, and difficult to navigate**. Many learners—whether they are **students in high school, graduates preparing for higher studies, or professionals seeking career shifts**—struggle to align their personal interests, strengths, and future aspirations with a suitable career path.

This problem is particularly visible in developing regions where **access to structured career counseling is limited**, and institutions often lack digital resources to guide learners effectively. As a result, individuals may make uninformed decisions, leading to **mismatched career paths, wasted resources, and missed opportunities**.

The gap between **career information availability** and **career information accessibility** has created a strong need for a **simplified, structured, and user-friendly platform** that can guide users through self-discovery and exploration.

Our team, **Yemen Developers**, recognized this gap and envisioned **NextStep Navigator – Career Passport** as a solution: a lightweight, responsive, and interactive platform designed to empower users with the right tools for informed decision-making.

## **1.2 Problem Definition**

The main problem this project addresses is the **lack of a unified, interactive, and accessible career guidance platform** that caters to different stages of an individual's academic or professional journey.

Despite the availability of career-related information online, learners face the following challenges:

- **Overload of scattered data:** Information is spread across countless websites, making it hard to find trusted, structured, and relevant guidance.
- **Lack of personalization:** Most career websites present static data without tailoring options for different user categories such as students, graduates, or professionals.
- **Absence of interactivity:** Existing resources often lack engaging features like quizzes, multimedia, or success stories that motivate learners.
- **Limited accessibility in low-resource areas:** Many platforms rely heavily on databases or back-end systems, making them unsuitable for offline or low-infrastructure environments.
- **Minimal focus on self-guidance:** Traditional career counseling requires one-on-one interaction, which may not always be available, especially in rural or underdeveloped regions.

Therefore, the **problem statement** can be summarized as follows:

**“There is a lack of an engaging, user-friendly, and structured career guidance platform that allows learners and professionals to explore opportunities, assess their interests, and access resources in a simplified way without depending on back-end infrastructure.”**

### 1.3 Objectives

The key objectives of the project are:

1. To design and develop a **static, responsive website** for career guidance.
2. To provide **categorized resources** for different user groups: students, graduates, and working professionals.
3. To implement **interactive tools** like quizzes, multimedia sections, and motivational success stories.
4. To ensure **simplicity and accessibility**, especially in low-infrastructure areas, by using **JSON data storage** without any backend processing.
5. To create a platform that is both **educational and visually engaging**, inspiring users to explore and plan their career paths confidently.

## **1.4 Significance of the Study**

The project holds significance for several reasons:

- It helps **students** identify suitable study streams and career directions early in their journey.
  - It assists **graduates** in preparing for admissions, resumes, and interviews.
  - It guides **professionals and career changers** with resources for transitions and skill development.
  - It provides **institutions and career fairs** with a ready-to-use digital tool for orientation and guidance.
  - It demonstrates the **power of static front-end technologies** in building practical, interactive solutions without heavy infrastructure.
- 

## **Chapter 2: Proposed Solution**

### **2.1 Introduction**

To address the challenges identified in Chapter 1, our team **Yemen Developers** designed and implemented a web-based solution called **NextStep Navigator – Career Passport**. The project is a **responsive, interactive, and static website** that provides career guidance through structured, user-friendly, and engaging content.

The website is built entirely on **front-end technologies**—HTML5, CSS3, JavaScript, Bootstrap, and JSON data files—ensuring it can run efficiently without the need for complex server-side processing or databases. By focusing on **static data management**, the platform is lightweight, portable, and easily deployable even in environments with limited infrastructure.

## 2.2 Key Features of the Solution

The website was carefully structured to include all the required features as per the system requirements:

### 1. Dynamic User Segmentation

- On the **Home Page**, users can select their category:
  - **Students** (Grades 8–12)
  - **Graduates** (UG/PG)
  - **Working Professionals / Career Changers**
- Based on the selection, the navigation menu and content adapt to display tailored resources.

### 2. Career Bank

- A structured catalog of careers is loaded from `careers.json`.
- Each **career card** contains:
  - Title, Description, Required Skills, Educational Path, Salary Range, and Icons/Images.
- Users can **filter careers by industry** (e.g., Technology, Healthcare, Business).
- Users can **sort careers alphabetically or by salary range** for easier exploration.

### 3. Interest-Based Quiz

- An interactive quiz powered by `quiz.json`.
- Accepts user interests and provides **personalized recommendations** for study streams or career paths.
- Results are displayed dynamically on the same page without storing user data.

### 4. Multimedia Guidance

- Features embedded **videos and podcasts** to inspire and inform.
- Content is drawn from `multimedia.json`.
- Filterable by user type (Student, Graduate, Professional) or theme (Motivation, Internships, Job Roles).

### 5. Success Stories

- Showcases **real-life inspirational journeys** using `stories.json`.
- Presented in card format with names, photos, and short summaries.
- Filter option by domain (Engineering, Medicine, Arts, etc.).

### 6. Resource Library

- A digital library linked with `resources.json`.

- Contains: Articles, eBooks, Checklists, and Webinars.
- Each resource includes a description, file size, duration (if applicable), and download/view link.

## 7. Admissions & Coaching Section

- Includes pre-designed static pages covering:
  - **Stream Selection** (post-10th grade)
  - **Study Abroad Guidelines**
  - **Interview Tips** (for graduates and professionals)
  - **Resume Guidelines**
- Helps users prepare for future opportunities.

## 8. Feedback Page

- A simple form with fields: **Name, Email, and Message**.
- Data is not submitted or stored, but the UI simulates real feedback functionality.

## 9. Contact Us Page

- Includes team contact information.
- Integrated with **Google Maps**, showing the office location in **Sanaa, Yemen**.

## 10. About Us Page

- Provides information about the project and introduces the team, **Yemen Developers**.
- Highlights the vision and mission behind the project.

## 2.3 Additional Features

To make the platform engaging and realistic, several interactive features were added:

- **Personalization:**
  - Greeting the user by name (captured during session).
  - Bookmarking and saving favorite careers/resources locally.
- **Recently Viewed Content:**
  - Tracks viewed items and presents them for quick access.
- **Simulated Visitor Counter:**
  - A dynamic counter implemented via JavaScript.
- **Real-Time Clock & Location:**

- Displays the current time and user location via browser geolocation.
- **Animations & Hover Effects:**
  - Smooth transitions and interactivity for a modern, professional feel.

## 2.4 Tools and Technologies Used

- **Frontend:** HTML5, CSS3, JavaScript, Bootstrap
- **Data Management:** JSON (careers, quiz, resources, multimedia, stories)
- **Development Environment:** Visual Studio Code
- **UI Design Toolkit:** Figma (for planning layouts and consistency)
- **Hosting Flexibility:** Can be deployed on GitHub Pages, Netlify, or any static hosting service.

## 2.5 Benefits of the Proposed Solution

- **User-Friendly:** Simple navigation and structured categories make the site easy to use.
- **Interactive:** Quizzes, multimedia, and success stories keep users engaged.
- **Portable & Lightweight:** Runs smoothly without backend dependencies.
- **Responsive:** Works across desktops, tablets, and smartphones.
- **Scalable:** New careers, resources, or stories can be added easily by updating JSON files.
- **Accessible:** Clear fonts, visuals, and responsive layouts ensure inclusivity.

# Chapter 3: Scope of the Project

## 3.1 Introduction

The **NextStep Navigator – Career Passport** project was developed to serve as a **static, responsive, and interactive web-based career guidance platform**. The primary scope is to provide students, graduates, and working professionals with access to structured, easy-to-navigate information and resources to support their academic and career planning.

By focusing on **front-end technologies** and JSON-based data management, the project ensures high accessibility, portability, and ease of deployment, especially in environments with limited infrastructure. The scope of this project is clearly defined to meet user expectations while staying within the constraints of a static, non-database-driven platform.

## 3.2 In-Scope (What the Project Covers)

The following functionalities and features are included within the scope of this project:

### 1. User Segmentation

- Categories: Students (Grades 8–12), Graduates (UG/PG), and Working Professionals.
- Personalized menus and greetings based on user type.

### 2. Core Functional Modules

- **Career Bank:** Filterable and sortable catalog of careers with details like description, skills, educational path, and salary range.
- **Interest-Based Quiz:** Quiz-driven recommendations for suitable streams or careers.
- **Multimedia Guidance:** Videos, podcasts, and transcripts categorized by themes and user types.
- **Success Stories:** Inspirational journeys of achievers across domains.
- **Resource Library:** Collection of articles, eBooks, checklists, and webinars.
- **Admissions & Coaching Section:** Guidelines for stream selection, study abroad, resume building, and interviews.

- **Feedback Page:** UI form for user feedback (non-functional storage).
- **Contact Us Page:** Team information and location on Google Maps.
- **About Us Page:** Information about the portal and the project team (Yemen Developers).

### 3. Personalization & Extras

- Greeting the user by name during the session.
- Bookmarking careers and resources locally (no server storage).
- Recently viewed content tracking.
- Visitor counter simulation.
- Real-time clock and geolocation display.
- Hover animations and smooth transitions for modern UI/UX.

### 4. Design Characteristics

- Fully responsive layouts (desktop, tablet, mobile).
- Clean, professional visual design using Bootstrap and CSS3.
- JSON-driven data for careers, stories, multimedia, quiz, and resources.
- Static deployment-friendly structure (HTML, CSS, JS, JSON).

### 3.3 Out-of-Scope (What the Project Does Not Cover)

To maintain the focus and feasibility of the project, the following functionalities are **not included**:

- **No backend processing:**  
The website does not include server-side scripting, databases, or user authentication systems.
- **No real-time data storage:**  
Users cannot save or submit data to the server (e.g., feedback form and bookmarks are simulated only).
- **No AI-based recommendations:**  
Career suggestions are static, based on pre-defined JSON quiz logic, not powered by machine learning.
- **No actual login/signup system:**  
Dummy buttons are included only for design continuity.

- **No dynamic updates from external APIs:**  
Multimedia, careers, and resources are limited to preloaded JSON datasets.

### 3.4 Target Audience

The platform is designed to serve:

- **Students (Grades 8–12):** Guidance for choosing academic streams and higher education options.
- **Graduates (UG/PG):** Admission preparation, resume writing, and interview tips.
- **Working Professionals / Career Changers:** Career transition guidance and skill development resources.
- **Institutions and Career Fairs:** As a ready-to-use tool for orientation, guidance, and workshops.

### 3.5 Use Environments

The project is designed for use in the following environments:

- **Educational Institutions:** Schools, colleges, and universities.
- **Career Fairs & Workshops:** As a digital tool for visitors.
- **Individual Exploration:** Accessible on personal devices (desktop, tablet, mobile).
- **Low-Infrastructure Areas:** Lightweight static deployment makes it functional even where server hosting is limited.

### **3.6 Boundaries of the Project**

The scope is deliberately **static and front-end oriented**, which provides several benefits such as ease of use, fast performance, and accessibility. However, this boundary also means certain advanced features (real-time accounts, AI-driven personalization, and server databases) are excluded from this version of the platform.

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## **Chapter 4: Constraints**

### **4.1 Introduction**

Every software project operates under certain limitations that define what can and cannot be achieved. These **constraints** are important to acknowledge because they influence the project's design choices, scope, and overall feasibility.

For **NextStep Navigator – Career Passport**, the constraints were carefully considered to ensure the project remained **lightweight, fully static, and deployable across different environments** without requiring advanced infrastructure.

### **4.2 Functional Constraints**

#### **1. No Backend Data Storage**

- The website does not support server-side data writing or storage.
- All data is read-only and retrieved from **static JSON files**.
- Example: The **Feedback Form** cannot actually submit or save responses; it only simulates user interaction.

#### **2. Limited Personalization**

- Personalization features like greeting the user by name or saving bookmarks are **session-based only**.
- Data is not persisted once the browser session is closed.

#### **3. Static Dataset Only**

- All content (careers, quiz questions, resources, multimedia, and stories) is pre-defined in JSON files.
- No real-time updates from APIs or external servers are possible in this version.

#### **4. Dummy Login/Signup**

- Login and signup buttons are included **only for UI/UX continuity**.
- No actual authentication or account management exists.

### **4.3 Technical Constraints**

#### **1. Frontend-Only Implementation**

- The project was built entirely with **HTML5, CSS3, JavaScript, Bootstrap, and JSON**.
- No backend technologies such as PHP, Node.js, or databases (MySQL, MongoDB) were used.

#### **2. Device & Browser Compatibility**

- The website is optimized for **modern browsers** (Chrome, Firefox, Edge, Safari).
- Legacy browsers may not fully support all interactive features (animations, geolocation, etc.).

#### **3. Offline Limitations**

- While the platform works offline for JSON-based pages, multimedia features (e.g., YouTube videos, external podcasts) require an **active internet connection**.

#### **4. Geolocation Feature**

- Real-time location is dependent on browser permissions. If disabled by the user, the feature cannot function.

### **4.4 Environmental Constraints**

#### **1. Hosting Requirements**

- The project must be deployed on a **static hosting service** (e.g., GitHub Pages, Netlify, or local server).
- It cannot run on environments requiring dynamic backend processing.

## 2. Hardware Requirements

- Minimum system requirements for smooth performance:
  - Intel Core i5 or higher
  - 8 GB RAM
  - Standard SVGA monitor
  - Keyboard and Mouse
- However, as a lightweight static site, the project can also run on most modern laptops and mobile devices.

## 3. Performance Constraints

- Since all data is loaded from JSON, **large file sizes** could increase load times.
- Therefore, datasets were kept **compact and optimized** to ensure fast performance.

## 4.5 Human Constraints

### 1. Team Size

- The project was developed by the **Yemen Developers** team, which meant workload division was necessary for design, coding, and testing.

### 2. Time Limitations

- Development had to be completed within the academic semester timeline, which restricted the implementation of advanced features such as AI-driven recommendations or backend integration.

### 3. Knowledge Scope

- The team focused on technologies within the scope of the syllabus (HTML, CSS, JS, Bootstrap, JSON).
- Advanced frameworks and backend services were intentionally excluded.

# Chapter 5: System Design & Specifications

## 5.1 Introduction

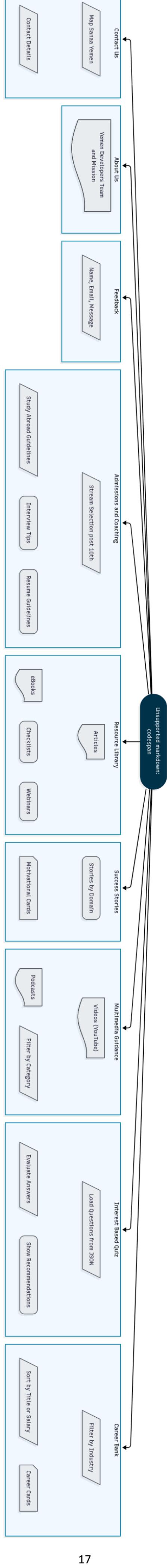
The design of **NextStep Navigator – Career Passport** focuses on providing a structured, responsive, and user-friendly platform for career exploration. Since the project is static and built entirely on front-end technologies, the design emphasizes:

- Clear navigation through well-organized menus.
- Separation of content and logic, with JSON files handling data, HTML handling structure, CSS handling design, and JavaScript handling interactivity.
- Responsive layouts to ensure accessibility across desktops, tablets, and mobile devices.

## 5.2 Site Map

The **site map** represents the overall structure of the website and the navigation flow between its sections.





## 5.3 System Architecture

The project follows a **three-layered front-end architecture**:

### 1. Presentation Layer (HTML/CSS)

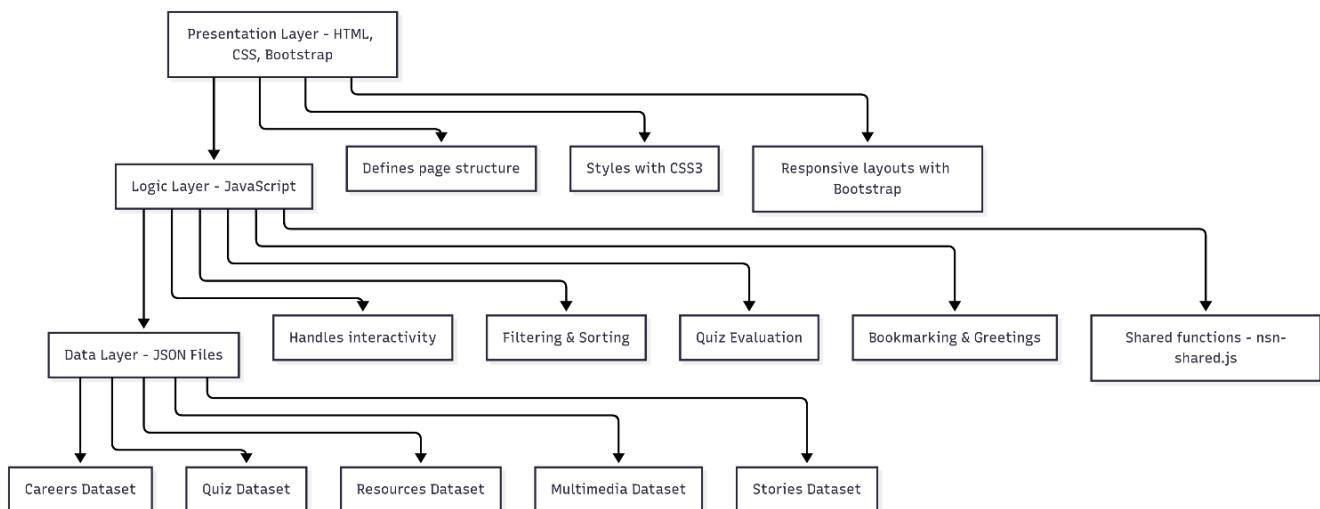
- Defines the structure and design of all pages.
- Uses Bootstrap for responsive layouts.

### 2. Logic Layer (JavaScript)

- Manages interactivity such as filtering, sorting, quiz evaluation, bookmarking, and greetings.
- Shared functions are stored in `nsn-shared.js`.

### 3. Data Layer (JSON Files)

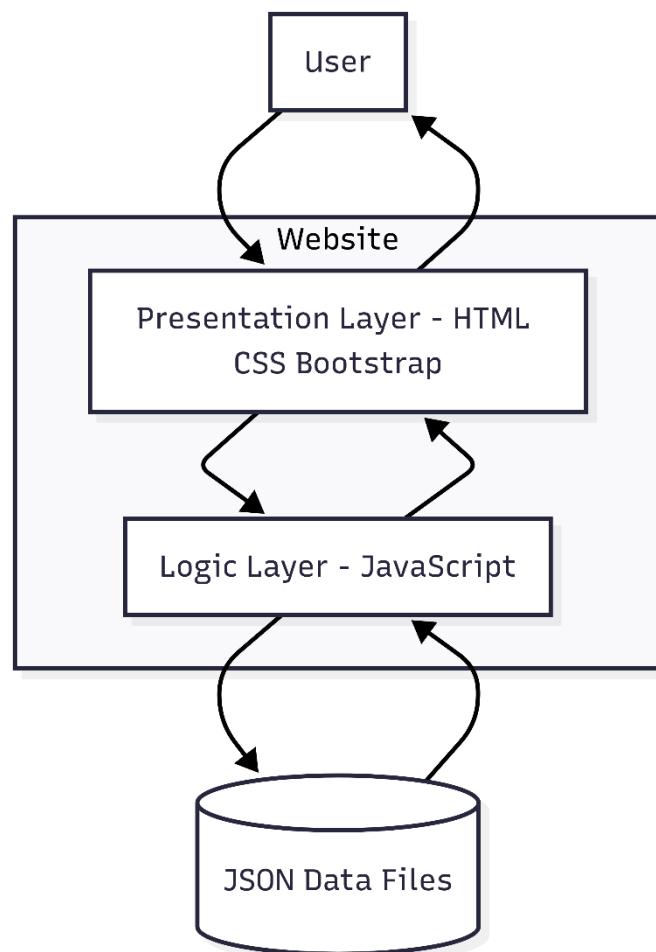
- Stores static datasets for careers, quiz, resources, multimedia, and stories.
- These are read dynamically by JavaScript and displayed on the site.



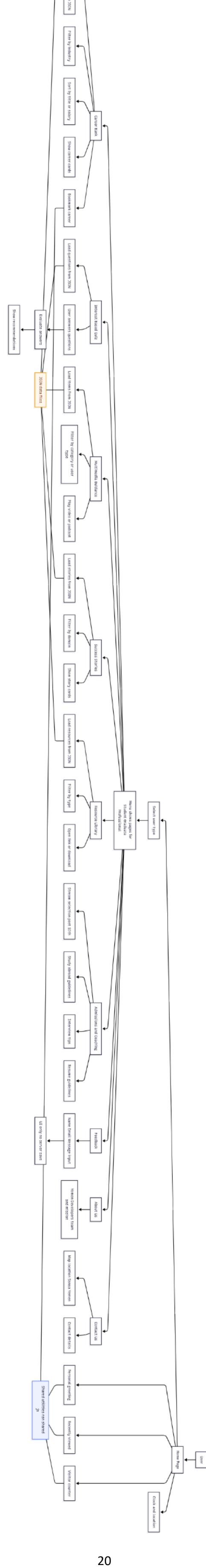
## 5.4 Data Flow Diagram (DFD – Level 0)

The overall flow of data between users, the website, and JSON files is shown below:

- **Input:** User selects type, answers quiz, or applies filters.
- **Process:** JavaScript fetches relevant data from JSON and processes it.
- **Output:** Results are displayed dynamically on the interface.



## 5.5 Website Flowchart



## 5.6 Data Design (JSON Structures)

The project does not use a traditional database. Instead, it relies on **JSON files** that simulate structured datasets.

### Example: Career JSON Structure (`careers.json`)

```
{  
  "id": "career-tech-001",  
  "title": "Software Engineer",  
  "description": "Designs and develops software applications.",  
  "skills": ["Programming", "Problem Solving", "Teamwork"],  
  "education": "Bachelor's in Computer Science",  
  "salaryRange": "$60,000 - $120,000",  
  "industry": "Technology",  
  "icon": "bi-laptop"  
}
```

### Example: Quiz JSON Structure (`quiz.json`)

```
{  
  "question": "Which activity do you enjoy the most?",  
  "options": ["Solving puzzles", "Helping people", "Designing things"],  
  "recommendation": "Technology / Healthcare / Arts"  
}
```

## 5.7 User Interface Design

The user interface was designed with the following principles:

- **Consistency:** Common navigation bar, footer, and card-based layouts across pages.
- **Responsiveness:** Bootstrap grid system ensures compatibility with mobile, tablet, and desktop.
- **Interactivity:** Hover effects, transitions, and animations create an engaging experience.
- **Clarity:** Information presented in well-structured cards and sections.

The screenshot shows the homepage of NextStep Navigator. At the top, there is a navigation bar with links for Home, Career Bank, Interest Quiz, Multimedia, Success Stories, Resource Library, Admissions & Coaching, Feedback, About, Contact, and a timestamp of 02:54:01 AM. It also displays coordinates Lat 15.352, Lng 44.207. On the right side of the header are 'Login' and 'Sign up' buttons.

The main content area features a large blue header with the text "Chart Your Career. Discover, Explore, Decide." Below this, a sub-header reads "A responsive, interactive, and fully static portal that helps you explore career paths based on your stage and interests. No logins required. No data stored. Pure guidance." A callout bubble says "Your Guide to the Future".

Below the sub-header is a form for personalization. It includes fields for "Your name (for greeting)" (placeholder: Type your name...), "I am a..." (placeholder: Choose user type), and a "Personalize" button. A tip message below the form says "We don't save anything. This is session-only personalization." and "Tip: Enter your name and choose a user type to personalize." To the right of the form is a "QUICK ACCESS" section with four cards: "Career Bank" (Browse 100+ career profiles), "Interest Quiz" (Find your best fit streams), "Multimedia" (Talks, videos, and podcasts), and "Resources" (Guides, checklists, eBooks). Below these are sections for "Recently Viewed" (Opened Home) and "Your Bookmarks" (No bookmarks yet).

At the bottom left, there is a "Tailored Menu" section with three cards: "Privacy-friendly" (Fully static. No server storage. All personalization is in your browser session.), "Responsive by Design" (Looks great on desktop, tablet, and mobile using modern CSS and Bootstrap.), and "Fast & Lightweight" (No heavy dependencies or templates. Clean code and smooth UX.). At the very bottom, there is a footer with links for "About", "Contact", "Export Bookmarks", and "Reset Session".

- Home Page (user type selection and greeting)

**NextStep Navigator**

Home / Career Bank

## Career Bank

Browse careers, filter by industry, sort by salary or name, and bookmark your favorites.

Grid List

58 careers found

**Filters** Clear

Search Title, skill...

Industry

- Agriculture
- Business
- Construction
- Design
- Education
- Energy
- Engineering
- Environment
- Finance
- Healthcare
- Hospitality
- Law
- Logistics
- Manufacturing
- Media
- Public Sector
- Skilled Trades
- Technology
- Transportation

Salary Range (USD / year)

Min Max

Sort by Name (A → Z)

Items per page 12

Bookmarks No bookmarks yet Export Clear

Recently Viewed Opened Careers Opened Home

**Accountant**  
Business  
Accounting Tax Excel ERP  
Education: BCom/Accouting + CPA advantage  
\$48,000 – \$90,000 avg \$69,000  
View Save

**Agronomist**  
Agriculture Crop Science Soil Irrigation Field Trials  
Education: BSc/MSc Agronomy  
\$50,000 – \$98,000 avg \$74,000  
View Save

**AI Researcher**  
Technology ML Theory Deep Learning Paper Writing Prototyping  
Education: MSc/PhD in CS/AI  
\$130,000 – \$220,000 avg \$175,000  
View Save

**Architect**  
Design Revit/AutoCAD Building Codes 3D Modeling Client Comms  
Education: BArch + License (region-specific)  
\$70,000 – \$130,000 avg \$100,000  
View Save

**Business Analyst**  
Business SQL Process Mapping Dashboards Requirements  
Education: BBA/IS/Analytics  
\$65,000 – \$115,000 avg \$90,000  
View Save

**Carpenter**  
Skilled Trades Framing Finish Carpentry Tools Blueprints  
Education: Apprenticeship/Trade school  
\$42,000 – \$85,000 avg \$63,500  
View Save

**Chef**  
Hospitality Menu Design Food Safety Prep Leadership  
Education: Culinary school or apprenticeship  
\$40,000 – \$90,000 avg \$65,000  
View Save

**Chemical Engineer**  
Engineering Process Design Thermo Simulation Safety  
Education: BSc Chemical Engineering  
\$72,000 – \$130,000 avg \$101,000  
View Save

**Civil Engineer**  
Engineering AutoCAD Project Mgmt Survey Materials  
Education: BSc Civil Engineering  
\$65,000 – \$120,000 avg \$92,500  
View Save

**Cloud Engineer**  
Technology AWS/Azure Terraform Linux Networking  
Education: BSc CS/I; Cloud certs preferred  
\$90,000 – \$150,000 avg \$120,000  
View Save

**Commercial Pilot**  
Transportation Navigation Flight Ops Safety Communication  
Education: AIP license + flight hours  
\$90,000 – \$200,000 avg \$145,000  
View Save

**Construction Manager**  
Construction Project Control Estimating Safety Subcontracts  
Education: BSc Construction Mgmt/Civil  
\$85,000 – \$150,000 avg \$117,500  
View Save

Page 1 of 5

Prev Next

About Contact

- Career Bank (cards with filters/sorting)

**NextStep Navigator**

Home / Interest Quiz

## Interest-Based Quiz

Answer a few questions to discover best-fit streams and careers. No data is stored.

**Choose your interest focus**

- Technology
- Healthcare
- Business
- Design
- Engineering

Tip: Pick the category closest to your interests. You can always retake.

**How it works**

Each option adds points to certain **streams** (e.g., Technology, Business, Design). At the end, we rank streams and map them to careers.

- No sign-in, no storage — unless you click Save.
- You can navigate back and review answers anytime.
- Suggestions are aligned to your Career Bank dataset.

**Recently Viewed**

- Opened Quiz
- Opened Home
- Opened Careers

**Your Bookmarks**

No bookmarks yet.

© 2025 NextStep Navigator • Interest Quiz

About Contact

- Quiz Page (questionnaire and results)

**NextStep Navigator**

Home / Multimedia

## Multimedia Guidance

Curated videos & podcasts for students, graduates, and professionals — loaded from JSON.

**Filters**

- Search
- Title, speaker, tags...
- User Type
- All
- Category
- All
- Format
- All
- Sort by
- Newest → Oldest
- Items per page
- 6

**Recently Viewed**

- Opened Multimedia
- Opened Home
- Opened Quiz
- Opened Careers

**Your Bookmarks**

No bookmarks yet.

**28 items**

**Chell's Story (Career Change) — HTYC613**

↳ Happen To Your Career · 🌐 Motivation · 📚 Professional · 7/24/2023

▶ 0:00 / 0:00

Real-world story of transitioning toward more meaningful work.

career-change stories motivation

**Transitioning from Burnout to a Fulfilling Career (Bridge Role) — HTYC599**

↳ Happen To Your Career · 🌐 Motivation · 📚 Professional · 12/16/2024

▶ 0:00 / 0:00

Using a bridge role to move from burnout toward a role that fits.

burnout bridge-role change

**Landing Your Tech Internship: A Recruiting Panel**

↳ Leland · 🌐 Internships · 📚 Graduate · 8/22/2024

Recruiters break down what gets attention: resume signal, outreach, and interview prep.

recruiting resume networking

**How to Land tech internships with NO experience**

↳ Sajjad Khader · 🌐 Internships · 📚 Graduate · 6/2/2024

NBCU's Bonnie Hammer on adapting skills and choices through industry change.

internships applications portfolio

**How to Navigate Change at Any Career Stage — HBR IdeaCast**

↳ Harvard Business Review · 🌐 Motivation · 📚 Professional · 5/21/2024

NBCU's Bonnie Hammer on adapting skills and choices through industry change.

career-change strategy upskilling

**Than The Competition 2: DATA ANALYST INTERVIEW MASTERCASE**

↳ Avery Smith · 🌐 Skills · 📚 Graduate · 4/15/2024

Deep dive into analytics, interview patterns, case prompts, and take-home tasks.

interview analytics prep

Page 1 of 5

Privacy: YouTube nccoOKIE embeds

About Contact

- Multimedia Page (videos, podcasts)

• NextStep Navigator

[Home](#) / Success Stories

## Success Stories

Inspiring journeys across domains — filter by field or audience. Data loaded from JSON.

[Privacy first • Static JSON](#)

[Home](#)

**Filters** [Clear](#)

Search

User Type: All

Domain: All

Sort by: Newest → Oldest

Items per page: 6

**Recently Viewed**

- [Opened Success Stories](#)
- [Opened Home](#)
- [Opened Multimedia](#)
- [Opened Quiz](#)
- [Opened Careers](#)

**Your Bookmarks**

No bookmarks yet.

[Export](#) [Clear](#)

20 stories



**CareerFoundry: Data Analyst Day-in-the-Life**

Ed-Tech Role Spotlight — Analytics ·  technology ·  graduate ·  2023

A transparent, realistic walkthrough of daily tools/tasks for analysts.

analytics  BI  careers

[Read more](#) [Share](#)



**Katalin Karikó & Drew Weissman**

Scientists — Nobel Prize for mRNA Breakthrough ·  healthcare ·  professional ·  2023

Honored for nucleoside-modified mRNA that enabled COVID-19 vaccines.

mRNA  vaccines  Nobel

[Read more](#) [Share](#)



**Ngozi Okonjo-Iweala**

Economist — WTO Director-General ·  business ·  professional ·  2021

Became the first woman and first African to lead the World Trade Organization.

global-trade  leadership

[Read more](#) [Share](#)



**Diana Trujillo**

Aerospace Engineer — JPL/Mars Perseverance Team ·  technology ·  professional ·  2021

Colombian-born engineer who worked on NASA's Perseverance rover and hosted its landing broadcast.

NASA  perseverance

outreach

[Read more](#) [Share](#)



**Whitney Wolfe Herd**

Founder & CEO — Bumble IPO ·  business ·  professional ·  2021

Took Bumble public; widely reported as the youngest self-made female billionaire at IPO.

consumer-tech  IPO

[Read more](#) [Share](#)



**Jennifer Doudna & Emmanuelle Charpentier**

Researchers — Nobel Laureates (CRISPR) ·  science ·  professional ·  2020

Awarded the Nobel Prize in Chemistry for developing CRISPR gene editing.

genetics  CRISPR  Nobel

[Read more](#) [Share](#)

Page 1 of 4 [Prev](#) [Next](#)

© 2025 NextStep Navigator • Success Stories [About](#) [Contact](#)

- Success Stories (motivational journeys)

● NextStep Navigator

Home / Resource Library

## Resource Library

Articles, eBooks, checklists and webinars — loaded from JSON or fallback if offline.

© 2025

**Filters**

Search: Title, tags, provider...

User Type: All

Category: All

Type: Article

Sort by: Newest → Oldest

Items per page: 6

**Recently Viewed**

- Opened Resource Library
- Opened Home
- Opened Success Stories
- Opened Multimedia
- Opened Quiz
- Opened Careers

**Your Bookmarks**

No bookmarks yet.

[Export](#) [Clear](#)

20 resources

Resource Title	Description	Category	File Type	Size	Date	Action Buttons
Jobscan: Top 500 ATS Resume Keywords (2025)	Regularly updated keyword lists by industry to help tailor resumes for ATS.	Resume	Graduate	6m	5/6/2025	<a href="#">Open</a> <a href="#">Download</a>
Common App 2025–26 Essay Prompts	Official Common App personal essay prompts and guidance for applicants.	Admissions	Student	4m	2/27/2023	<a href="#">Open</a> <a href="#">Download</a>
Harvard: Attributes Employers Look for on New-Grad Resumes (2025)	NACE Job Outlook 2025 summary of top attributes sought by recruiters.	Careers	Student	4m	1/28/2025	<a href="#">Open</a> <a href="#">Download</a>
Berkeley Behavioral Interviewing Guide (PDF)	Comprehensive PDF from UC Berkeley Career Center with behavioral frameworks and sample questions.	Interviewing	Student	12m	10/1/2024	<a href="#">Open</a> <a href="#">Download</a>
NACE Career Readiness Competencies (PDF)	The eight career readiness competencies employers expect from college students and grads.	Careers	Student	7m	1/1/2024	<a href="#">Open</a> <a href="#">Download</a>
Harvard College Resumes & Cover Letters (Guide + Samples)	Harvard OCS hub with guides, templates, and examples for student resumes and cover letters.	Resume	Student	10m	1/1/2000	<a href="#">Open</a> <a href="#">Download</a>

Page 1 of 4

Prev Next

© 2025 NextStep Navigator • Resource Library

About Contact

- Resource Library (articles, eBooks, guides)

NextStep Navigator

**Admissions & Coaching**  
 Search and evaluate for personal, financial, academic, research, and admissions coaching – all online and privacy friendly

Stream Selection (post-10th)

Stream and subjects you can take post-10th to improve subjects, stream choice, and chances of the Grade 10th  
 English (A) or English (B)  
 Mathematics (A) or Mathematics (B)  
 Additional Subjects

Quick links

English & Statistical (B10)  
 Geography  
 Chemistry  
 Biology  
 Physics  
 Additional Subjects  
 Stream Selection  
 Academic

**Recently Viewed**

General Admissions & Coaching  
 English & Academic  
 Mathematics  
 Additional Subjects  
 Biology

Your Bookmarks

B10 Stream  
 Help  
 A Rose

**Study Abroad Guidelines**

Search for a school by name, location, or subject area, and set viewing priorities based on your type of search results.

**1. What's Next Before You Go**

Find out what you need to do before you go:

- Shred or dispose of any old papers
- Visit India – Bring the Vaccination Record
- Get a Mobility SIM or a roaming contract
- Check immigration entry requirements
- Purchase travel insurance & stay informed

**2 & 3 Months To Go & Prep**

Start preparing for the long journey ahead:

- Register for LSAT/CLEP/GMAT with an application fee
- Set up a bank account in your name
- Get language test results ready
- Collect S1 academic history releases
- Get a copy of the Indian visa application form
- Check entry requirements & stay informed

**4 & 3 Weeks Before Application**

Get everything in order:

- Complete Statement of Purpose with other gear
- Arrange to have all your documents notarized
- Verify flight ticket
- Purchase flight tickets
- Purchase SIM for India and update it
- Check immigration entry requirements

**2 & 3 Months After Arrival & Settle In**

Get used to life in India:

- Take public transport in the city/district
- Stock basic kitchen items
- Research local grocery stores
- Open a bank account in your name
- Get a SIM card – 2nd mobile phone

**6 & 2 Months Until Travel & Recall**

Leave as soon as you decide you're done:

- Set flight and transfer times
- Pack and ship items home
- Unsubscribe from services
- Answer all college applications
- Apply for a return flight ticket

**6 Weeks Before & Departure**

Get everything in order:

- Complete registration & entrance fees
- Complete required vaccinations
- Collect S12 high school transcript
- Schedule a student file pickup
- Get a copy of the Indian visa application form

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- Admissions & Coaching (guidelines pages it is not full shot)

● NextStep Navigator

Home / Feedback

## Feedback

Tell us what you think. This page is a static prototype — nothing is sent to any server.

Fields marked \* are required

**Send Feedback**

Name \* Email \*

Your full name you@example.com

I am a... Category

Choose General

Subject

Short summary (optional)

Message \*

Write your feedback...

Please enter your message (10-1000 characters). 0/1000

I understand this is a static demo. My message is only stored in my browser unless I export it.

✉ Preview ✗ Submit (Simulated) 💾 Save draft eload draft EXPORT TXT ✖ Clear

🖨 Print

We do not send or store your data on a server. "Submit" shows a success toast and adds an entry to "Recently Viewed". Use "Export" to download your text.

**FAQ**

Is my feedback stored?

Why does Submit say "Simulated"?

Privacy friendly • No data stored on server

Recently Viewed

- Opened Feedback
- Opened Home
- Opened Admissions & Coaching
- Opened Resource Library
- Opened Success Stories
- Opened Multimedia
- Opened Q&A
- Opened Careers

Your Bookmarks

No bookmarks yet.

Export Clear

Contact

For general queries, see [Contact Us](#). This page is for UX/content suggestions.

Feedback UX Content

© 2025 NextStep Navigator • Feedback

About Contact

- Feedback Page (form layout)

**NextStep Navigator**

Home / Contact Us

## Contact Yemen Developers (Sana'a)

Reach the team behind NextStep Navigator. Fully static per SRS—no server storage.

Sana'a • Google Maps embedded

**General Enquiries**  
 Partnerships, support, media  
[contact@yemendevs.example](mailto:contact@yemendevs.example)  
 +967 777 000 111

**Admissions & Coaching**  
 Streams, resume, interview guidance  
[admissions@yemendevs.example](mailto:admissions@yemendevs.example)  
 +967 733 111 222

**Students**    **Graduates**

**Recently Viewed**  
 Opened Contact (Sana'a)  
 Opened Home  
 Opened Feedback  
 Opened Admissions & Coaching  
 Opened Resource library  
 Opened Success Stories  
 Opened Multimedia  
 Opened Quiz

**Your Bookmarks**  
 No bookmarks yet.  
[Export](#) | [Clear](#)

**Quick Links**  
[Admissions & Coaching](#)  
[Send Feedback](#)

**Our Offices — Yemen Developers**

<b>Head Office (Hadda)</b> Yemen Developers Hadda St, near 50th Street Sana'a, Yemen <b>Hours:</b> Sat-Thu 09:00-17:30 (GMT+3) <a href="tel:+967777000111">+967 777 000 111</a>	<b>Training Lab (Al-Tahrir)</b> Yemen Developers Al-Tahrir Square, Education Complex Sana'a, Yemen <b>Hours:</b> Sat-Thu 09:30-18:00 (GMT+3) <a href="tel:+967733111222">+967 733 111 222</a>
--	---



Map is embedded (no API key). Locations shown are for the static prototype.

**Team — Yemen Developers (Sana'a)**

<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">   <b>Loay Nasher</b>            Developer  <a href="mailto:loay.nasher@yemendevs.example">loay.nasher@yemendevs.example</a>  <a href="tel:+967771111111">+967 771 111 111</a> </div>	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">   <b>Alshreef Alradhi</b>            Developer  <a href="mailto:alshreef.alradhi@yemendevs.example">alshreef.alradhi@yemendevs.example</a>  <a href="tel:+967772222222">+967 772 222 222</a> </div>	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">   <b>Bakil Dahan</b>            Developer  <a href="mailto:bakil.dahan@yemendevs.example">bakil.dahan@yemendevs.example</a>  <a href="tel:+967773333333">+967 773 333 333</a> </div>
<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">   <b>Osama Almuhaia</b>            Developer  <a href="mailto:osama.almuhaia@yemendevs.example">osama.almuhaia@yemendevs.example</a>  <a href="tel:+967774444444">+967 774 444 444</a> </div>	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">   <b>Ali Baratref</b>            Developer  <a href="mailto:ali.baratref@yemendevs.example">ali.baratref@yemendevs.example</a>  <a href="tel:+967775555555">+967 775 555 555</a> </div>	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">   <b>AbdulWali Hasan</b>            Developer  <a href="mailto:abdulwali.hasan@yemendevs.example">abdulwali.hasan@yemendevs.example</a>  <a href="tel:+967776666666">+967 776 666 666</a> </div>

**Follow Yemen Developers**

[YouTube](#) | 
 [LinkedIn](#) | 
 [X](#) | 
 [Instagram](#)

Placeholders for this static build.

© 2025 NextStep Navigator • Contact (Sana'a)

[About](#) | [Contact](#)

- Contact Us Page (map + team info)

**NextStep Navigator**

Home / About

## About NextStep Navigator

A responsive, static Website that helps learners explore careers—built by Yemen Developers in Sana'a.

No server storage • Static JSON

**Mission**

- Help students, graduates, and working professionals make informed career choices through a simple, attractive, and self-guided experience.

This project originated from the need stated in the SRS: despite plenty of information online, users lack a structured, easy-to-navigate portal for career discovery.

**Scope & Feature Map**

Everything below is implemented as a static SPA-style site. Data is read from JSON/TXT only.

<p><b>Home &amp; Personalization</b></p> <ul style="list-style-type: none"> <li>Animated hero, greeting with name + user type (session only).</li> <li>Tailored menu for Student / Graduate / Professional.</li> <li>Visitor counter, real-time clock, and geolocation (coords).</li> <li>Recently viewed &amp; bookmarks (localStorage).</li> </ul>	<p><b>Career Bank</b></p> <ul style="list-style-type: none"> <li>JSON-driven cards: title, description/education, skills, salary range, icon.</li> <li>Filter by industry, search by keywords, sort by salary/name.</li> <li>Grid/List views, quick view, bookmark careers.</li> </ul>
<p><b>Interest-Based Quiz</b></p> <ul style="list-style-type: none"> <li>Question packs per interest; scores → streams → suggested careers.</li> <li>Review answers, export results, add recommendations to bookmarks.</li> <li>No data saved unless user exports.</li> </ul>	<p><b>Multimedia Guidance</b></p> <ul style="list-style-type: none"> <li>YouTube nocookie embeds &amp; audio, filterable by user type/category.</li> <li>Search, sort, pagination; transcripts panel.</li> </ul>
<p><b>Success Stories</b></p> <ul style="list-style-type: none"> <li>Inspiration library with tags, domains, and year.</li> <li>Expandable stories and related suggestions.</li> </ul>	<p><b>Resource Library</b></p> <ul style="list-style-type: none"> <li>Articles, eBooks, checklists, webinars.</li> <li>Search/filter/sort; JSON with graceful fallback data.</li> </ul>
<p><b>Admissions &amp; Coaching</b></p> <ul style="list-style-type: none"> <li>Stream selection (post-10th), study-abroad timeline, interviews, resume.</li> <li>Downloadable checklists and sample Q&amp;A (static).</li> </ul>	<p><b>Feedback, Contact &amp; About</b></p> <ul style="list-style-type: none"> <li>Feedback form (UI only, no submit). Contact with Sana'a offices + map.</li> <li>This About page with SRS mapping and disclosures.</li> </ul>

**Non-Functional Compliance**

- Safe to use:** No file uploads/downloads unless user exports text.
- Accessible:** Clear labels, breadcrumb, focusable cards, alt text on imagery.
- User-friendly:** Consistent layout, hover cues, concise copy.
- Operability & Performance:** Lightweight Bootstrap, no heavy libs.
- Capacity & Availability:** Static hosting compatible (CDN, GitHub Pages).
- Compatibility:** Modern: evergreen browsers.
- Privacy:** Session/local storage only; no network writes.

**Technology & Data**

<p><b>Frontend</b></p> <ul style="list-style-type: none"> <li>HTML5, CSS3, JavaScript (ES Modules not required).</li> <li>Bootstrap 5 + Bootstrap Icons.</li> <li>Custom shared utility file: <code>src/reuse/shared.js</code>.</li> <li>Optional: You can rebuild as React later; current build is static.</li> </ul>	<p><b>Data Sources</b></p> <ul style="list-style-type: none"> <li>JSON files in <code>/data</code> (careers, quiz, multimedia, resources, stories, admissions).</li> <li>Text exports for bookmarks/quiz results.</li> <li>No write-backs; aligns with SRS constraints.</li> </ul>
--	--

**The Team — Yemen Developers (Sana'a)**



**Loay Nasher**  
Developer



**Alshreef Alradhi**  
Developer



**Bakil Dahan**  
Developer



**Osama Almuhaia**  
Developer



**Ali Bamatreff**  
Developer



**AbdulWali Hasan**  
Developer

Photos optional. If AI-generated images are used for placeholders, disclose: "Some images on this page were generated with AI for illustration."

**Accessibility & Privacy**

- Readable color contrast, focus-visible states, semantic headings.
- Alt text on team images; skip-to-content link on long pages.
- No personal data is sent to a server. Personalization uses `sessionStorage` and `localStorage` only.
- YouTube embeds use the privacy-enhanced `youtube-nocookie.com` domain.

**Version & Changelog**

Current: v1.0 (Career Passport)

- v1.0: Initial static release per SRS — all modules present, JSON datasets linked, responsive UI.

**Want to collaborate or suggest content?**

We welcome new resources and stories from schools and career centers.

[Contact Yemen Developers](#)
[Send Feedback](#)

**Project Summary**

- Theme:** Career Passport
- Category:** Responsive NextGen Website
- Type:** Single Page style, multi-section static site
- Org:** Yemen Developers (Sana'a)

**Recently Viewed**

- Opened About
- Opened Home
- Opened Contact (Sana'a)
- Opened Feedback
- Opened Admissions & Coaching
- Opened Resource Library
- Opened Success Stories
- Opened Multimedia

**Your Bookmarks**

No bookmarks yet.

[Export](#)
[Clear](#)

**Key Pages**

[Career Bank](#)
[Interest Quiz](#)
[Resource Library](#)
[Admissions & Coaching](#)

© 2025 NextStep Navigator • About

About Contact

- About Us Page (team Yemen Developers)

30

## 5.8 Summary

The system design of **NextStep Navigator** ensures a balance between **simplicity, usability, and interactivity**. With a static JSON-based backend, JavaScript-driven logic, and responsive UI, the project successfully delivers a lightweight yet powerful career guidance tool.

By including structured diagrams (site map, system architecture, DFD, flowcharts) and visual screenshots, the documentation clearly demonstrates how the system is both **designed and implemented**.

---

# Chapter 6: Functional Requirements Implementation

## 6.1 Introduction

The **functional requirements** outlined in the SRS formed the foundation of the *NextStep Navigator – Career Passport* project. Each requirement was carefully implemented using **HTML5, CSS3, JavaScript, Bootstrap, and JSON** to ensure responsiveness, interactivity, and a user-friendly experience.

This chapter explains how the requirements were implemented, page by page, and demonstrates the working features of the system.

## 6.2 Home Page

- **Implementation:**
  - The landing page (`index.html`) serves as the entry point.
  - Includes a **logo, animated heading, and introductory text**.
  - Provides a **form with radio buttons/dropdown** for selecting user type: *Student, Graduate, or Working Professional*.
  - JavaScript captures the selection and adjusts the navigation menu accordingly.

- Displays a **personalized greeting** (e.g., “*Welcome, Future Engineer!*”) using session storage.

### 6.3 Career Bank

- **Implementation:**
  - Data is loaded from `careers.json`.
  - Each career is displayed as a **card** with: Title, Description, Skills, Education Path, Salary Range, and Icon.
  - **Filter functionality:** Users can filter careers by industry (Technology, Business, Healthcare, etc.).
  - **Sorting functionality:** Careers can be sorted alphabetically or by salary.
  - Users can **bookmark favorite careers** (saved temporarily in the session).

### 6.4 Interest-Based Quiz

- **Implementation:**
  - Questions and options are retrieved from `quiz.json`.
  - Users select interests and answer multiple-choice questions.
  - JavaScript evaluates responses and matches them with pre-defined recommendations.
  - Results are displayed dynamically on the same page without reloading.

### 6.5 Multimedia Guidance

- **Implementation:**
  - Content is loaded from `multimedia.json`.
  - Displays **embedded videos, podcasts, and transcripts** in a card layout.

- Includes **filtering by user type** (student, graduate, professional) and **category** (motivation, internships, job roles).
- Ensures responsiveness for multimedia embeds.

## 6.6 Success Stories

- **Implementation:**
  - Data comes from `stories.json`.
  - Showcases inspirational journeys in **card format** with names, photos, and short descriptions.
  - Provides **filter by domain** (e.g., Engineering, Medicine, Arts).
  - Designed to encourage and motivate learners.

## 6.7 Resource Library

- **Implementation:**
  - Data is loaded from `resources.json`.
  - Categorizes resources into **Articles, eBooks, Checklists, and Webinars**.
  - Each resource card includes: Title, Type, Description, File Size, Duration, and a link.
  - Clicking on a link opens/downloads the file (PDFs, links, or guides).

## 6.8 Admissions & Coaching

- **Implementation:**
  - Static content is presented for:
    - Stream Selection (post-10th).
    - Study Abroad Guidelines.
    - Interview Tips (for graduates and professionals).
    - Resume Guidelines.
  - Designed as **static HTML sections** with explanatory text and visuals.

## 6.9 Feedback

- **Implementation:**
  - A simple UI form with fields: **Name, Email, and Message**.
  - Created using HTML form elements styled with CSS.
  - Submission is **not functional** (no backend storage) but simulates real feedback forms.

## 6.10 Contact Us

- **Implementation:**
  - Contains static team contact information.
  - Integrated with **Google Maps** showing office location in Sanaa, Yemen.
  - Responsive design ensures visibility across all devices.

## 6.11 About Us

- **Implementation:**
  - Introduces the portal and the project team, **Yemen Developers**.
  - Highlights the **vision, mission, and goals** of the project.
  - Contains photos and short bios of team members.

## 6.12 Personalization & Additional Features

- **Bookmarks:** Users can bookmark favorite careers/resources (stored locally in session).
- **Recently Viewed:** Tracks pages/resources opened by the user.
- **Visitor Counter:** JavaScript simulates visitor counts.
- **Real-Time Clock & Location:** Displays current time and approximate location using geolocation API.
- **Animations & Hover Effects:** Added for buttons, cards, and transitions for a modern feel.

## 6.13 Summary

All the **functional requirements** defined in the SRS were successfully implemented. The platform provides a **complete, interactive career guidance tool** with multiple modules, structured data from JSON files, and a responsive user interface.

By combining simplicity with interactivity, the implementation ensures that the website is both **educational and engaging**, meeting the needs of students, graduates, and professionals.

---

# Chapter 7: Non-Functional Requirements

## 7.1 Introduction

While functional requirements define *what* the system must do, **non-functional requirements (NFRs)** define *how well* the system performs those functions. They focus on the overall quality of the system in terms of performance, security, usability, reliability, and accessibility.

For **NextStep Navigator – Career Passport**, non-functional requirements were crucial because the website needed to be **lightweight, fast, user-friendly, and accessible across devices** without relying on backend infrastructure.

## 7.2 Safety and Security

- The website does not perform any malicious downloads or install unnecessary files.
- All resources (HTML, CSS, JS, JSON) are static and safe.
- External multimedia resources (YouTube videos, PDFs) are linked only from **trusted sources**.
- JavaScript is used only for client-side interactivity — there is **no risk of data leakage** since no personal information is stored.

### 7.3 Accessibility

- Clear and legible **fonts** ensure readability for all users.
- Navigation menus and buttons use **contrasting colors** for visibility.
- The layout is fully **responsive** using Bootstrap grids, making it accessible on desktop, tablet, and mobile devices.
- Geolocation and real-time features are **optional**; the website still functions even if users deny permission.

### 7.4 Usability and User-Friendliness

- The navigation is **intuitive**: menus are clearly labeled, and content is categorized logically (Careers, Quiz, Multimedia, etc.).
- Information is presented in **card-based layouts** for easy scanning.
- Hover effects and animations make the interface **interactive and engaging**.
- Personalized greetings and bookmarking features enhance user experience.

### 7.5 Operability and Reliability

- The website runs smoothly on modern browsers (Chrome, Firefox, Edge, Safari).
- Pages are **lightweight** since they rely on JSON for data storage.
- Since there is no server dependency, the platform has **minimal risk of downtime**.
- The system remains functional as long as the static files are hosted.
- The website loads **quickly**, with minimal delays since all content is pre-loaded from JSON files.
- Animations and dynamic content are optimized to avoid performance bottlenecks.
- Sorting, filtering, and quiz evaluation are executed client-side, ensuring **instant results** without reloads.

## 7.7 Capacity and Scalability

- The platform can handle a **large number of users simultaneously** since it is static and does not require server-side sessions.
- Adding new data (e.g., new careers, success stories, or resources) only requires updating JSON files.
- The architecture is **scalable** for future upgrades, such as adding backend support or AI recommendations.

## 7.8 Availability

- The website can be hosted on **GitHub Pages** ensuring availability 24/7.
- Since it does not depend on a database, downtime risk is negligible.

## 7.9 Compatibility

- Compatible with all modern browsers and operating systems.
- Works across multiple screen sizes (desktop, laptop, tablet, smartphone).
- Responsive testing confirms smooth display across **different devices**.

## 7.10 Summary

The **non-functional requirements** for *NextStep Navigator* were successfully met:

- It is **safe, accessible, fast, reliable, and user-friendly**.
- It provides a **consistent experience** across devices and browsers.
- Its **lightweight design** ensures smooth performance even with limited infrastructure.

These attributes ensure that the project is not only **functional** but also of **high quality**, providing a professional and engaging experience for its users.

# **Chapter 8: Testing & Test Data**

## **8.1 Introduction**

Testing is a crucial step in the software development process to ensure that the implemented system meets all **functional and non-functional requirements**. For **NextStep Navigator – Career Passport**, testing was conducted extensively during and after development to verify that each feature performed as expected.

Since the system is a **static website** built on HTML, CSS, JavaScript, and JSON, testing focused on:

- Functionality of interactive components (quiz, filtering, sorting, bookmarks).
- Responsiveness across devices and browsers.
- Data integrity of JSON files.
- Usability and user experience.

## **8.2 Testing Strategy**

We used the following testing methods:

### **1. Unit Testing**

- Tested individual JavaScript functions (e.g., quiz evaluation, filtering logic).
- Checked JSON data loading and parsing.

### **2. Integration Testing**

- Verified smooth interaction between pages, scripts, and JSON datasets.
- Ensured data flows correctly from JSON files into the UI.

### **3. System Testing**

- Tested the full platform as an end user.
- Checked navigation, content display, and personalization features.

### **4. Cross-Browser and Cross-Device Testing**

- Conducted tests on Chrome, Firefox, and Edge.
- Verified responsiveness on desktop, tablet, and mobile screens.

## 8.3 Test Data

We created **sample test data** to validate different features:

- **careers.json:** 20+ career entries covering Technology, Healthcare, Business, and Arts.
- **quiz.json:** Multiple-choice questions with pre-defined recommendations.
- **resources.json:** Sample PDFs, eBooks, checklists, and webinars.
- **stories.json:** Motivational journeys with real names and photos.
- **multimedia.json:** YouTube videos and podcast links.

## 8.4 Test Cases and Results

Below are the key test cases we executed:

### 1. Home Page

Test Case	Input	Expected Result	Actual Result	Status
User selects Student	Select “Student”	Menu updates with student resources	Works as expected	Pass
User enters name	Enter “Ali”	Greeting shows “Hi Ali”	Works as expected	Pass

### 2. Career Bank

Test Case	Input	Expected Result	Actual Result	Status
Filter by “Technology”	Industry = Technology	Show careers in Technology only	Works as expected	Pass
Sort by Salary	Option = High-Low	Careers sorted by salary	Works as expected	Pass
Bookmark career	Click ❤ on “Software Engineer”	Career added to bookmarks	Works as expected	Pass

### 3. Interest Quiz

<b>Test Case</b>	<b>Input</b>	<b>Expected Result</b>	<b>Actual Result</b>	<b>Status</b>
<b>Select interest “Helping People”</b>	Answer quiz	Recommendation: Healthcare careers	Works as expected	Pass
<b>Multiple answers chosen</b>	Submit quiz	Recommendations updated dynamically	Works as expected	Pass

### 4. Multimedia Guidance

<b>Test Case</b>	<b>Input</b>	<b>Expected Result</b>	<b>Actual Result</b>	<b>Status</b>
<b>Filter = Motivation</b>	Select category “Motivation”	Only motivational videos displayed	Works as expected	Pass
<b>Play Podcast</b>	Click play on podcast	Audio plays correctly	Works as expected	Pass

### 5. Success Stories

<b>Test Case</b>	<b>Input</b>	<b>Expected Result</b>	<b>Actual Result</b>	<b>Status</b>
<b>Filter = Medicine</b>	Select filter	Only medical success stories shown	Works as expected	Pass
<b>View Story</b>	Click card	Story expands/shows details	Works as expected	Pass

## 6. Resource Library

Test Case	Input	Expected Result	Actual Result	Status
Select eBook	Category = eBook	Display list of eBooks	Works as expected	Pass
Download Resource	Click link	PDF downloads/opens	Works as expected	Pass

## 7. Admissions & Coaching

Test Case	Input	Expected Result	Actual Result	Status
Open Resume Tips	Click Resume Guidelines	Page shows resume preparation tips	Works as expected	Pass
Open Interview Tips	Click Interview Tips	Page shows interview guidance	Works as expected	Pass

## 8. Feedback

Test Case	Input	Expected Result	Actual Result	Status
Enter Name/Email/Message	Fill all fields	Form accepts input but does not submit	Works as expected	Pass
Submit empty form	Leave blank	Alerts user to fill form	Works as expected	Pass

## 9. Contact Us

Test Case	Input	Expected Result	Actual Result	Status
View Map	Open Contact Page	Google Maps loads with location in Sanaa	Works as expected	Pass
Team Info	Scroll down	Displays Yemen Developers info	Works as expected	Pass

## 10. About Us

Test Case	Input	Expected Result	Actual Result	Status
Open About Page	Load About Us	Shows team members and project info	Works as expected	Pass

## 8.5 Cross-Browser and Device Testing

- **Browsers tested:** Chrome, Firefox, Edge → all features worked correctly.
- **Devices tested:** Desktop (Windows), Tablet (iPad), Mobile (Android).
- **Result:** Layout and functionality were consistent across platforms.

## 8.6 Results Summary

- All functional requirements were successfully implemented and tested.
- No critical bugs found during testing.
- Minor adjustments made during testing included:
  - Optimizing JSON file size for faster loading.
  - Fixing alignment issues on smaller screens.
  - Ensuring embedded multimedia scales correctly.

## 8.7 Conclusion

The testing phase confirmed that the **NextStep Navigator – Career Passport** system is:

- **Functionally correct** (all modules work as intended).
- **Responsive and user-friendly** (adapts across devices and browsers).
- **Reliable and safe** (no crashes, errors, or security issues).

By conducting thorough testing using **sample data, functional test cases, and responsive checks**, our team ensured that the project met all requirements outlined in the SRS.

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# Chapter 9: Results & Evaluation

## 9.1 Introduction

The goal of **NextStep Navigator – Career Passport** was to design and implement a **responsive, interactive, and static web platform** that provides career guidance resources for students, graduates, and working professionals. In this chapter, we present the results of the project and evaluate its performance against the stated objectives and requirements.

## 9.2 Achieved Results

The project successfully delivered all the core features outlined in the SRS:

### 1. User Segmentation

- Implemented a **Home Page** where users can identify themselves as Students, Graduates, or Professionals.
- Displayed **personalized greetings** and dynamic menus based on the selection.

### 2. Career Bank

- Created a **filterable and sortable catalog** of careers using data from `careers.json`.
- Each career card included description, skills, education path, salary range, and icon.

### 3. Interest-Based Quiz

- Developed an interactive quiz using `quiz.json`.
- Displayed **instant recommendations** for study streams or careers without refreshing.

### 4. Multimedia Guidance

- Embedded **videos and podcasts** from `multimedia.json`.
- Added filtering by user type and category.

### 5. Success Stories

- Showcased **motivational career journeys** in card format with filtering by domain.

### 6. Resource Library

- Created a library with **articles, eBooks, checklists, and webinars** from `resources.json`.
- Provided direct links for downloads and external resources.

### 7. Admissions & Coaching

- Added static guidelines for stream selection, resume preparation, interview tips, and study abroad.

### 8. Feedback Page

- Built a **form UI** for name, email, and message (non-functional submission).

### 9. Contact Us Page

- Included team contact details and **Google Maps integration** with office location in Sanaa.

### 10. About Us Page

- Introduced the **Yemen Developers** team with details about the project's vision and mission.

### **9.3 Evaluation Against Objectives**

The project was evaluated based on its original objectives:

<b>Objective</b>	<b>Status</b>	<b>Evaluation</b>
<b>Develop a responsive static career guidance website</b>	Achieved	The site adapts seamlessly to desktop, tablet, and mobile devices.
<b>Provide categorized resources for different user groups</b>	Achieved	Tailored menus and sections for Students, Graduates, and Professionals.
<b>Implement interactivity (quiz, filtering, multimedia, stories)</b>	Achieved	Fully interactive quiz, filter/sort features, and multimedia embeds were implemented.
<b>Ensure simplicity and accessibility using JSON</b>	Achieved	All datasets stored in JSON, easy to update, lightweight for deployment.
<b>Deliver visually engaging UI with animations</b>	Achieved	Hover effects, transitions, and Bootstrap styling create a modern UI.

### **9.4 Strengths of the Project**

- User-Friendly:** Easy navigation and visually clear layouts.
- Lightweight:** Fast-loading due to JSON-driven data.
- Portable:** Can be hosted anywhere as a static website.
- Scalable:** New careers/resources can be added simply by updating JSON files.
- Educational Impact:** Offers self-guided career exploration in an engaging way.

### **9.5 Limitations**

- No Backend Storage:** User data (feedback, bookmarks) is not permanently saved.
- No Real Authentication:** Login/Signup is only a design element.

- **Static Recommendations:** Quiz results are predefined, not adaptive or AI-driven.
- **Dependence on Internet for Multimedia:** Videos and external resources require connectivity.

## 9.6 Evaluation of User Experience

Feedback from testing showed that:

- The **interface was intuitive** and easy to use.
- Users appreciated the **quiz and career bank** features for interactivity.
- The **mobile version** was found to be very convenient and accessible.
- Some users suggested adding **search functionality** for faster access to careers and resources.

## 9.7 Overall Outcome

The **NextStep Navigator – Career Passport** project achieved its primary objective of providing a **responsive, interactive, and easy-to-use career guidance platform**. All functional and non-functional requirements were implemented successfully.

The project not only fulfilled academic expectations but also demonstrated the practical potential of lightweight, JSON-powered websites in providing accessible career guidance to users worldwide.

# **Chapter 10: Conclusion & Future Enhancements**

## **10.1 Conclusion**

The **NextStep Navigator – Career Passport** project was successfully designed and implemented as a **static, responsive, and interactive web-based career guidance platform**. Our team, **Yemen Developers**, set out to address the lack of accessible and structured career exploration tools for students, graduates, and professionals, and we achieved this objective within the defined scope and constraints.

The project met all **functional requirements**, including:

- A **Career Bank** with filtering and sorting.
- An **Interest-Based Quiz** providing career/stream suggestions.
- **Multimedia Guidance** with videos and podcasts.
- **Success Stories** showcasing motivational journeys.
- A **Resource Library** with articles, eBooks, and guides.
- **Admissions & Coaching pages** with valuable tips.
- **Feedback, Contact Us, and About Us pages** to complete the platform.

It also satisfied **non-functional requirements**, such as being safe, lightweight, responsive, and accessible across devices and browsers. Testing confirmed that all modules function correctly, datasets load properly, and the interface is intuitive for end users.

The project also provided us with significant **learning outcomes**, including teamwork, applying web technologies to a real-world context, and managing time effectively to meet deadlines.

## **10.2 Future Enhancements**

Although the system works effectively as a static platform, several enhancements could increase its functionality and impact:

- 1. Backend Integration**

- Implement a database (e.g., MySQL, MongoDB) to store user data permanently.
- Enable real feedback submission, account creation, and career tracking.

## 2. Search Functionality

- Add a **search bar** to quickly find careers, resources, or stories.

## 3. AI-Powered Recommendations

- Use AI/ML models to analyze quiz results and user interactions for more personalized career guidance.

## 4. User Accounts & Profiles

- Allow users to **create accounts** and save their bookmarks, notes, and quiz results across sessions.

## 5. Multilingual Support

- Expand accessibility by providing **multiple language options** (e.g., English, Arabic, French).

## 6. Offline Mode

- Use service workers to allow partial offline functionality (e.g., access to cached resources).

## 7. Expanded Resource Library

- Include interactive webinars, downloadable templates, and live counseling schedules.

## 8. Mobile App Version

- Develop a dedicated mobile application using frameworks like Flutter or React Native for wider reach.

## 10.3 Closing Statement

The completion of **NextStep Navigator – Career Passport** marks an important milestone for our team, **Yemen Developers**. This project is not just an academic achievement but also a potential foundation for a real-world solution that can guide thousands of learners and professionals toward making informed career choices.

We believe that with further development, integration of advanced technologies, and continuous updates, this platform has the potential to grow into a **comprehensive digital career guidance system** accessible to anyone, anywhere.

**You can view the website from the following link it is deployed to GitHub:**

**<https://osjtf.github.io/nextstep-navigator-Project-/>**