

# AI-Based Future Counselling Website

## 1. Introduction

The **AI-Based Future Counselling Website** is an intelligent web platform designed to guide students and graduates in making informed career decisions. By combining structured assessments, user profiling, and AI-driven recommendations, the system provides personalized career pathways aligned with users' skills, interests, academic background, and market trends.

The platform aims to replace or augment traditional counselling with a scalable, data-driven, and unbiased solution accessible anytime.

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## 2. Objectives

- Provide personalized, AI-driven career counselling
  - Help students and graduates identify suitable career paths
  - Reduce confusion and indecision regarding future careers
  - Automate and scale the counselling process
  - Offer actionable guidance (skills to learn, certifications, roadmap)
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## 3. Target Users

- High school students (career exploration)
  - University students (career alignment)
  - Fresh graduates (career specialization)
  - Career switchers (future enhancement – optional)
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## 4. Core Features

### 4.1 User Authentication

- Sign up (Email / Google / LinkedIn – optional)
- Login
- Password recovery

### 4.2 User Onboarding (Mandatory on First Signup)

Onboarding is a guided, multi-step flow to understand the user before recommendations.

#### Onboarding Data Collected:

- Education level (Intermediate / Undergraduate / Graduate)

- Field of study (e.g., Computer Science)
- Institution & graduation year
- Current status (Student / Graduate / Working)
- Basic interests (Technology, Design, Business, Research, etc.)
- Preferred work style (Remote / Office / Hybrid)
- Country / Region (for market relevance)

Progress indicator shown (Step 1 of 5).

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## 5. User Dashboard UX

### 5.1 Landing After Login

After successful login, the user lands on the **Main Dashboard**.

### 5.2 Dashboard Layout

#### Sidebar (Left):

- Dashboard
- Career Quiz
- AI Recommendations
- Career Roadmap
- Skill Gap Analysis
- Saved Careers
- Profile Settings
- Logout

#### Top Bar:

- User name
- Profile completeness indicator
- Notifications

#### Main Content Area:

##### Analytics Cards (Top Section)

- Profile Completion %
- Quiz Status (Not Started / In Progress / Completed)
- Recommended Career Paths (Count)
- Skill Readiness Score

##### Center CTA Section

A large, visually prominent card:

##### "Start Career Assessment Quiz"

- Subtitle: *"Discover your ideal career path based on your skills and interests"*
- Estimated time (e.g., 12–15 minutes)

If quiz already started:

- "Continue Quiz"

If completed:

- "View AI Recommendations"
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## 6. Career Assessment Quiz – UX Design

### 6.1 Quiz Structure

The quiz is adaptive and divided into sections:

1. Background Verification
2. Interest Mapping
3. Skill Assessment
4. Cognitive & Problem-Solving Style
5. Career Preferences

Each section shows:

- Progress bar
  - Question count
  - Save & Exit option
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## 7. UX Flow: Computer Science Graduate

### 7.1 Entry Point

User clicks "**Start Quiz**" from dashboard.

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### 7.2 Section 1: Academic Background (Auto-prefilled)

**UX Behavior:**

- Most data pre-filled from onboarding
- Editable if needed

**Sample Questions:**

- Degree: BS Computer Science
- Graduation Year
- GPA / Grade (Optional)
- Key subjects studied:
  - Data Structures
  - Databases
  - Operating Systems
  - AI / ML
  - Software Engineering

## 7.3 Section 2: Interest Mapping

### UX Style:

- Card-based selections
- Visual icons per domain

### Sample Questions:

- Which activities excite you the most?
    - Building applications
    - Solving algorithms
    - Working with data
    - Designing systems
    - Research & innovation
  - Which domains interest you?
    - Web Development
    - Mobile Apps
    - Artificial Intelligence
    - Cyber Security
    - Game Development
    - Cloud & DevOps
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## 7.4 Section 3: Skill Assessment

### UX Style:

- Self-rating sliders (Beginner → Expert)

### Sample Skills:

- Programming Languages:
  - Python
  - Java
  - JavaScript
  - C++
- Frameworks:
  - Django / Flask
  - React
- Databases:
  - MySQL / PostgreSQL
- Concepts:
  - OOP
  - DSA
  - APIs

Optional: Upload GitHub / Portfolio link.

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## 7.5 Section 4: Problem-Solving & Work Style

### UX Style:

- Scenario-based MCQs

### Sample Questions:

- You enjoy tasks that are:
    - Structured and planned
    - Exploratory and experimental
  - You prefer working:
    - Alone
    - In a team
  - When solving a problem, you:
    - Focus on logic first
    - Focus on user experience first
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## 7.6 Section 5: Career Preferences

### UX Style:

- Toggle + ranking

### Sample Questions:

- Preferred career goal:
    - High-paying job
    - Research-based career
    - Startup / Entrepreneurship
    - Work-life balance
  - Preferred industry:
    - Tech companies
    - Freelancing
    - Government
    - Academia
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## 8. AI Recommendation Output (Post-Quiz UX)

### 8.1 Results Page

#### Top Section:

- Personalized greeting
- Overall Career Match Score

#### Recommended Career Cards:

Each card contains:

- Career Title (e.g., Backend Software Engineer)

- Match Percentage
  - Why this suits you (AI explanation)
  - Required Skills
  - Average Salary (Region-based)
  - Demand Trend (Graph)
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## 8.2 Career Detail View

Clicking a career opens a detailed page:

- Role overview
  - Daily responsibilities
  - Skill gap analysis (Your skills vs Required)
  - Learning roadmap (Beginner → Advanced)
  - Suggested courses & certifications
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## 9. Admin Panel Features

### 9.1 Admin Roles

- Super Admin
- Content Admin

### 9.2 Admin Capabilities

- Manage users
  - Manage quiz questions
  - Manage career paths
  - View analytics & usage stats
  - AI model tuning (weights, scoring)
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## 10. AI & Technical Overview (High-Level)

- NLP-based profiling
  - ML-based career recommendation engine
  - Rule + ML hybrid scoring
  - Continuous learning from user feedback
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## 11. Future Enhancements

- Resume analysis
- Job market integration (LinkedIn, Indeed)
- Mentor matching
- Chat-based AI counsellor

- Premium personalized sessions
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## 12. Success Metrics

- Quiz completion rate
  - Recommendation acceptance rate
  - User satisfaction score
  - Repeat visits
  - Career roadmap engagement
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**End of Document**