

SKILL LADDER – EMPOWERING LOCAL WORKERS, DIGITALLY



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INTRODUCTION

93% of India's workforce is part of the informal sector – including:

Plumbers, electricians, painters

Domestic help, drivers, construction workers

Tailors, welders, gardeners, carpenters

These workers often lack a digital presence or reliable way to showcase their skills.

Barriers they face:

- No resumes or formal education
- Limited English and digital literacy
- Lack of access to job apps built for white-collar jobs
- Employers struggle to find trusted, nearby workers quickly

SOLUTION – SkillLadder



A mobile-first platform to help daily wage & semi-skilled workers create profiles using:

- Voice input (no typing or English required)
- Photo uploads of their work or tools
- Employers can post jobs just as easily via voice or text
- Simple, visual-first interface with local language readiness
- Offline-friendly so it works in low-connectivity areas



For Workers (like plumbers, tailors, electricians):

- Create a profile using just voice and images – no resume, no typing
- Say your name, skill (e.g., "electrician"), location, and work details aloud
- Upload photos of past work or tools (e.g., installed fan, stitched blouse)
- Profiles appear instantly in local job listings

For Employers (homes, shops, contractors):

- Use voice or text to describe the job needed
- Upload optional site image (e.g., house, store, ID poster)
- Jobs go live in real-time – visible to workers nearby

KEY FEATURES

Worker Profile Creation

- Input: Name, Skill, Location
- Voice-to-text for describing skills
- Upload images of completed work/tools

Employer Job Posting

- Post job using voice or typed description
- Add site photo, address, or contact info

Listings

- Workers see new job posts nearby
- Employers see available local workers

Matching & Notifications

- Smart suggestions based on skill/location
- Employers notified when new workers join nearby

Inclusive UI

- Large buttons, icons
- Regional language support
- Minimal navigation steps



USER FLOW

USER JOURNEY (WORKER & EMPLOYER)

Worker Flow:

- Open app → Use mic to say name + skill
- Choose skill category → Upload photo of work
- Submit profile → Appears in listings



Employer Flow:

- Open app → Use mic or type job details
- Upload location photo or site image
- Submit → Appears in listings, workers get notified

TECH STACK

FRONTEND:

- REACT
- TAILWIND CSS
- HTML5, CSS3, JAVASCRIPT (ES6)
- WEB SPEECH API FOR VOICE INPUT
- DOM APIs

BACKEND:

- NODE.JS (EXPRESS)

DATABASE:

- MYSQL

OFFLINE SUPPORT:

- USES LOCAL STORAGE FOR OFFLINE JOB/PROFILE DRAFTS

OFFLINE & ACCESSIBILITY STRATEGY

- Works without internet for profile/job creation
- Saves data temporarily using local storage
- Designed for low-end Android devices
- Local language-ready, with support for Hindi, Tamil, etc.
- Large visual icons and minimal steps – ideal for non-tech users

SOCIAL IMPACT

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