

The features of LabWorkz work together to create an overall Adaptive Learning experience for Learning Users. The goal of these features is to help cater to this main feature. With the implementation of a personalized learning environment, users' progression history can be tracked. The data is presented to Professional users who are registered to be recruiters in the job field. Allowing these Professionals to see the personal progression of the learner helps them pinpoint and communicate with those who are working towards a specific field such as cybersecurity. The feature list provided below helps with the two main features of an Adaptive Learning Path and Communication of push and pull with Recruiters.

Team Feature List:

**1. Comprehensive Coding Tutorials with a built-in terminal**

- Offer a library of tutorials covering various programming languages and technologies in demand in the tech industry, enabling students to improve their skills based on current trends.

**2. Adaptive Learning Paths:**

- Design custom learning tracks based on a student's skill level, goals (e.g., job, freelance, entrepreneurship), and preferred languages, guiding them through a personalized curriculum that adapts as they progress

**4. Student Community Forum**

- Establish a community forum where students can engage in discussions, share coding challenges, collaborate on projects, and keep up with industry trends, fostering a collaborative learning environment.

**5. Student Progress Tracking for Recruiters**

- Implement a feature where recruiters can access student profiles that show their learning journey, progress in coding challenges, and overall skill development over time. This will help recruiters spot candidates with strong growth potential.

**6. Resource Library**

- The sidebar of the user is mostly used to help outsource information if the app doesn't provide enough information on a topic. The Resource Library allows users to see stored information, select this information, and access it through the sidebar tab.

**7. Student Search and Filtering by Recruiters**

- Enable a recruiter search tool that allows employers to find students based on specific skill sets, challenge performance, and certifications, making it easier for recruiters to identify job-ready candidates.

#### **8. Reminder system**

- A system that outputs notifications on users' Phones/Pc about lessons that need to be done. (can be disabled and enabled). The reminder system ensures students stay on track with their learning goals by sending notifications for upcoming lessons, tasks, or deadlines to their phones or PCs. The notifications can be customized, enabled, or disabled according to user preference, offering flexibility while promoting consistent learning habits. This feature helps students maintain a steady pace of progress, preventing them from falling behind on important lessons or tasks.

#### **9. Coding Interview Simulations**

- Develop a coding interview simulation feature where students can practice coding problems in a timed environment, simulating real interview experiences to improve job readiness. The coding interview simulation feature allows students to practice coding problems in a timed, real-world interview setting. This feature mimics the pressure and format of actual coding interviews, helping students develop problem-solving skills, time management, and familiarity with the kinds of questions they may encounter. By practicing in this environment, students become better prepared for job interviews, increasing their confidence and readiness to succeed.

#### **10. Portfolio Builder:**

- The portfolio builder feature enables students to showcase their projects, coding challenges, certifications, and skills in a professional, recruiter-facing profile. This tool allows users to present their technical capabilities in a way that highlights their most relevant achievements, making it easy for recruiters to assess their qualifications. The portfolio can also be updated regularly, reflecting continuous growth and newly acquired skills, helping students stand out in a competitive job market.

#### **11. Gamification and Achievements:**

- The gamification feature adds an element of fun and motivation to the learning process by rewarding students with points, badges, and achievements as they complete tutorials, challenges, and projects. Leaderboards can also encourage friendly competition and goal-setting among students. This system promotes engagement, as students are

motivated to reach new milestones, unlock achievements, and climb the ranks, all while improving their coding skills.