**Vision and Scope Document**

**for**

**KIP & BRICS School**

**Version 1.0 (to be approved)**

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**06.02.2025**

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# Revision History

| **Name** | **Date** | **Reason For Changes** | **Version** |
| --- | --- | --- | --- |
| Initial version | 06.02.2025 |  | Version 1.0 |
|  |  |  |  |

# Business Requirements

*The KIP - Career Engineering Portal is being developed to address the challenges students and professionals face in skill development, career growth, and job placement while providing companies with an efficient way to identify and hire top talent. The following business requirements define the project's strategic goals and expected benefits:*

## Background

*In today’s competitive job market, students and young professionals often struggle to develop relevant skills, gain real-world experience, and connect with potential employers. Traditional career development methods, such as internships and networking events, are often limited in reach and accessibility.*

*Robosoft identified a gap in the market for a digital solution that offers structured skill development, gamified learning experiences, and direct career opportunities. The KIP - Career Engineering Portal is designed to bridge this gap by providing an interactive platform where users can enhance both Hard Skills and Soft Skills through competitions, challenges, and practical tasks.*

*The platform also addresses the challenges faced by companies in finding skilled professionals. By allowing business to assess candidates based on their participation and achievements in platform activities, KIP serves as a dynamic talent acquisition tool, ensuring that employers connect with highly qualified individuals.*

*With built-in-salary estimation, skill progression tracking, and resume generation, KIP aims to empower users in their career journey while providing companies with a streamlined hiring process. The combination of learning, engagement, and recruitment makes KIP a unique and essential tool for career development in the modern workforce.*

## 1.2. Business Opportunity

*In today’s competitive technology landscape, companies struggle to find skilled candidates with proven, hands-on experience in solving real-world problems. Traditional resumes and academic credentials often fail to accurately reflect an individual’s true capabilities. At the same time, students and professionals seeking job opportunities lack a structured way to demonstrate their skills in a meaningful and measurable way.*

*The proposed platform bridges this gap by allowing users to complete tasks, participate in mock hackathons, and engage in competitions. Their results are not only stored in a database but also dynamically shape their skill polygon, a visual representation of their competencies on the platform. This skill polygon evolves based on completed tasks and achievements, guiding users toward specialized career paths. Additionally, the system will generate resume recommendations tailored to each user’s strongest and most developed skill sets. This data-driven approach enhances recruitment efficiency and provides users with clear career development opportunities.*

## 1.3. Business Objectives

* *Provide an engaging and structured platform for skill development.*
* *Offer a transparent salary estimation tool to help users understand market trends.*
* *Facilitate career advancement by generating professional resumes.*
* *Enable companies to find and recruit skilled professionals efficiently.*
* *Gamify learning and skill enhancement through competitions and hackathons.*
* *Introduce a virtual currency system for profile customization and user engagement.*

## 1.4. Success Metrics

*To measure the success of the KIP - Career Engineering Portal, the following key performance indicators (KPIs) will be tracked:*

*User Engagement & Growth:*

* *Number of registered users within the first 6 months and 1 year.*
* *Percentage of active users participating in competitions and tasks.*
* *Average time spent on the platform per user per session.*

*Skill Development & Progression:*

* *Number of competitions and tasks completed per user.*
* *Percentage of users advancing in skill levels over time.*
* *Number of resumes generated based on user skill progression.*

*Employer Engagement & Hiring Success:*

* *Number of companies registered on the platform.*
* *Number of job offers made through the platform.*
* *Percentage of users who secure employment or internships via KIP.*

*Financial & Monetization Metrics:*

* *Revenue generated from virtual currency purchases.*
* *Numbers of users purchasing customization options.*
* *Retention rate of paying users.*

*User Satisfaction & Platform Performance:*

* *Average rating and feedback from users and companies.*
* *Response time for support requests and issue resolution.*
* *System uptime and platform stability.*

*By tracking these metrics, the KIP - Career Engineering Portal can continuously improve its offerings, ensure user satisfaction, and establish itself as a leading career development ans recruitment platform.*

## 1.5. Vision Statement

*KIP - Career Engineering Portal* is designed to gather people with different experience in engineering, and has two main components:

* Brics.School: A platform for employers to find talent

through practical tasks

* Kip.hub: A platform for students to create resumes,

participate in competitions and develop skills

**Our vision:**

Provide a portal which connects students, young professionals, and industry experts that foster skill development, collaboration, and real-world experience in one ecosystem where talents will have opportunities to participate in innovative solutions creation.

## 1.6. Business Risks

Problems with development time

**Risk**: Difficulties with main and additional functionality implementation leading to failure in meeting deadlines.

**Severity**: Medium - the duration of the project development directly affects the launch and introduction of the product to the customer and users.

**Mitigation**: Clear planning of development stages, regular meetings with stakeholders, response to integration problems, prioritization of key functions for implementation in the first version (MVP).

Problems with integration and implementation

**Risk**: Possible problems when integrating existing solutions for holding competitions

**Severity**: Medium, as successful integration is important to hold various events on external platforms.

**Mitigation**: Test integrations early in development, ensure that events are up-to-date on these platforms

Product’s acceptance by user

**Risk**: Users may face some difficulties with all functions at the first time.

**Severity**: High, because the success of a product is dependent on its level of user adoption and use.

**Mitigation**: Simplify the interface for maximum intuitiveness, possibly have FAQ section or in-depth guides for some functions

**1.7. Business Assumptions and Dependencies**

Technologies:

Frontend: HTML, CSS, Javascript, TypeScript, React, Redux, MUI;

Backend: will be based on Python;

DB: Postgresql.

Possible dependencies from third-party solutions:

Some events require external platforms, for example, to distribute prizes.

# Scope and Limitations

## 2.1. Major Features

**Brics School**

* Register company profile, login and logout;
* Upload competitions by a company with selected distribution region;
* Set and adjust parameters of a competition: name, description, pictures, number of participants, and service rewards.

**KIP**

* Register student profile, login and logout;
* Choose speciality and avatar;
* View current skills HP and predicted salary;
* Generate resumes;
* View list of available and completed competitions;
* Participate in competitions;
* Gain rewards in skills HP for the completed competitions;
* Get evaluation from industry leaders based on skills and achievements;
* Various customization possibilities.

## 2.2. Scope of Initial Release

Initial release will have basic features for both platforms:

Brics.school:

* registration;
* login and logout;
* creating contests;
* adjusting contest settings;
* display students registered for the contest;
* choosing contests winners;

KIP.hub:

* registration;
* login and logout;
* speciality choice;
* profile competencies, skills and statistics display;
* resume generation;
* list of available and completed contests display;
* participation in contests.

These actions require initial implementation of skills visualization, reward calculation and progress tracking.

## 2.3. Scope of Subsequent Releases

*Future releases of the KIP - Career Engineering Portal will introduce additional features to enhance user engagement, improve skill development, and streamline employer interactions. These updates will be implemented in phases based on user feedback, market demand, and platform growth.*

*Phase 1: Advanced Skill Development & Personalization:*

* *AI-driven skill recommendations based on user activity and industry trends.*
* *Personalized learning paths tailored to user goals and career aspirations.*
* *Advanced skill visualization tools, including real-time progress tracking.*

*Phase 2: Expanded Gamiication & Social Features:*

* *Mentorship programs, where experienced users guide newcomers.*
* *Community forums for discussions, networking, and knowledge sharing.*
* *Additional avatar customizations and virtual goods marketplace.*

*Phase 3: Enhanced Career Services & Job Matcjing:*

* *AI-powered job matching based on skills, experience, and employer needs.*
* *Internship and apprenticeship listings for students and entry-level professionals.*
* *Integrated application tracking system for job applications within the platform.*

*Phase 4: Corporate & Educational Institution Integration*

* *Company-sponsored training programs with certifications.*
* *Integration with universities for course credits and career services.*
* *API integration with external learning platforms (e.g., Coursera, Linkdin, Learning).*

*Phase 5: Mobile App & Global Expansion:*

* *Dedicated mobile application for seamless on-the-go-access.*
* *Multilingual support to cater to cater to an international user base.*
* *Region-specific salary estimations and job market insights.*

*Each subsequent release will be evaluated based on user adoption, engagement metrics, and industry trends, ensuring the platform continues to evolve as a premier career development and recruitment solution.*

## 2.4. Limitations and Exclusions

Some of the formulas to estimate candidates by their skill levels still in development

Proposed that only desktop version for browser is supported

# Business Context

The KIP and BRICS project is a digital platform ecosystem designed to connect students, young professionals, and engineering experts with companies seeking top talent and innovative solutions. The platforms aim to bridge the gap between academic learning and real-world industry needs through skill-based competitions, resume-building tools, and industry collaboration.

## 3.1. Stakeholder Profiles

| **Stakeholder** | **Major Value** | **Attitudes** | **Major Interests** | **Constraints** |
| --- | --- | --- | --- | --- |
| **Executives** | Increased revenue, market expansion, and enhanced company reputation. | See the platform as a means to achieve a 25% increase in market share. | Richer feature set than competitors, shorter time to market, competitive edge. |  |
| **Students (18-24 years)** | Gain access to modern technologies, find mentors, and start a career in engineering. | Highly motivated, and eager to showcase skills and network. | Participating in competitions, resume building, and direct access to potential employers. | Limited work experience, requires structured career guidance and mentorship. |
| **Young Professionals (24-30 years)** | Upgrade skills, improve professional status, and find investors or like-minded collaborators. | Seeking career advancement, upskilling, and better job opportunities. | Industry certifications, networking, participation in advanced competitions, and access to high-paying roles. | Time constraints due to work responsibilities, and limited access to niche training programs. |
| **Engineering Experts & Academicians (30-50 years)** | Find resources for scientific and engineering activities, and establish cooperation with innovative companies. | Open to industry collaboration, focused on research and mentoring. | Research funding, industry-academic partnerships, and access to cutting-edge projects. | Limited availability, constrained by research and administrative duties. |
| **Medium and Small Companies** | Identify skilled professionals through competitions, hire for unique projects, and hold hackathons. | Looking for cost-effective, innovative solutions and quick hiring. | Hiring skilled talent, increasing brand visibility, and fostering R&D collaborations. | Budget constraints, and limited HR resources for talent scouting. |
| **Large Corporations** | Expand partnerships with universities, recruit top talent, and conduct innovation-driven competitions. | Focus on attracting highly skilled engineers and developing cutting-edge solutions. | Organizing talent competitions, acquiring top-tier engineers, and strengthening industry-university ties. | Long hiring cycles, compliance with corporate policies, and need for long-term ROI. |
| **Universities and Colleges** | Partner with companies to improve education quality, attract students for internships, and develop engineering departments. | Keen on strengthening industry collaboration and increasing student career opportunities. | Collaborative research, industry-academic partnerships, modernized and practical curriculum. | Bureaucratic constraints, limited funding for external partnerships, slow adoption of industry trends. |

## 3.2. Project Priorities

| **Dimension** | **Driver (Objective)** | **Constraint (Limits)** | **Degree of Freedom (Allowable Range)** |
| --- | --- | --- | --- |
| **Schedule** | Analysis and Design by 17/03/2025,  Release 1.0 by 19/05/2025  Release 1.1 by 23/06/2025  Release 1.3 (final version) by 28/07/2025 | Strict adherence to release timeline to maintain competitive advantage | Minor delays (up to 2 weeks) allowed for critical feature completion |
| **Features** | Ensure that 75-85% of high-priority features are included in Release 1.0 | Core functionalities such as User management, Competition hosting, and Resume generation must be fully operational | Additional features may be deferred to Release 1.1 if necessary |
| **Quality** | Achieve high platform usability and engagement | 92-97% of user acceptance tests must pass for Release 1.0, 96-99% for Release 1.1 | Minor bug fixes and optimizations post-release |
| **Staffing** | Ensure sufficient development and operational support | Maximum team size: 1 PM, 4 Developers |  |
| **Budget** | Keep project costs within an acceptable range | A budget overrun up to 15% is acceptable with a sponsor review | Additional funding available upon executive approval for high-impact enhancements |

## 3.3. Deployment Considerations

* **Infrastructure**: use web application to access all functions
* **System accessibility**: accessible from desktop version of browser
* **Integration requirements**: integrate services to hold events and calculate/distribute prizes
* **Training and implementation**: interface should be easy to use and understandable, and possibly have section with help