Outline for Bachelor Thesis: Web-Based Application Development

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Title Page

* + Title of the thesis: Little PM business portalfor kids: launching a profitable business in 7 days.
  + Student’s name and ID: Damir Kabi
  + University, department, and faculty (13142) Center for Software Training
  + Thesis supervisor’s name. Ing.Jiri Sebek
  + Date of submission. 21.10.2024

Abstract

This thesis presents a web-based platform designed specifically for children aged 7 and older to guide them through the process of launching a business in just 7 days. The platform is accessible online, ensuring ease of use from any location. It follows a structured framework where kids are assigned daily tasks from Day 1 to Day 7, progressively building towards the actual business launch on the final day.

One of the key problems this platform solves is the difficulty many children and parents face in understanding and explaining basic business concepts, such as what a business is, how to gather investment, and how to calculate return on investment (ROI). The platform simplifies these complex ideas into easy-to-follow tasks, making the entire process engaging for children. Additionally, it reduces the burden on parents by automating explanations and calculations, allowing kids to independently complete their business setup. The application’s user-friendly design empowers children to grasp fundamental business skills in a fun and educational way, without requiring parental involvement.

* + Keywords:

 Web-based platform

 Business education for kids

 Entrepreneurship for children

 7-day business launch

 ROI calculation for kids

 User-friendly application

 Child-friendly business framework

 Financial literacy for children

 Parent-free business guidance

 Online learning tool

Acknowledgments

* + Optional section to express gratitude to people who contributed to the research and development process.

List of Figures and Tables

A section that lists all figures, diagrams, and tables used in the thesis, with corresponding page numbers. We will write it later, once we have all figures (starting from Venn diagram) and tables (including list of functionality tables)

**Introduction**

Problem Statement:

Many children are eager to learn about how businesses operate, but both they and their parents often struggle to break down complex concepts like business planning, investment, and calculating return on investment (ROI) into manageable steps. Parents face challenges in explaining these ideas in a way that is engaging and simple for kids to understand. Additionally, children lack the necessary tools and structured guidance to independently explore and implement business ideas.

Existing financial literacy applications for children often fall short because they focus primarily on theory and abstract examples rather than actionable steps. They are not designed to provide a hands-on, practical experience that leads to real-world results. This lack of action-oriented guidance leaves children with a limited understanding of how to apply what they’ve learned in a concrete and meaningful way.

Our web-based platform addresses these issues by offering an action-oriented framework that guides kids through the entire process of launching a business in just 7 days. Using principles of project management, the platform takes children from the initial idea to the market, providing daily, structured tasks that focus on "how" to do the business, rather than theoretical concepts. This approach helps children actively engage with and apply business fundamentals in a practical, results-driven manner, while reducing the need for parental involvement.

Purpose of the Web-Based Application

The primary motivation behind developing this web-based application is to ensure accessibility and ease of use for both children and schools. Unlike mobile applications, which often require installation and regular updates, web-based platforms can be accessed directly through a browser on any device, eliminating the need for additional software downloads or installations. This makes it much easier for kids to engage with the platform without technical barriers, such as insufficient storage space or device compatibility issues.

Furthermore, schools can more readily integrate and whitelist a web application compared to assessing and installing mobile apps on their devices. Web-based applications do not require individual device management or complex app approval processes, making them a more convenient choice for educational institutions. This broader accessibility ensures that more children can benefit from the platform, both at home and in school environments, fostering an inclusive and seamless learning experience.

Objectives: 

The objective of this work is to develop a web-based platform that provides children aged 7 and older with a comprehensive and accessible framework to launch their own business in just 7 days. This platform aims to address the challenges faced by both children and parents in understanding and explaining fundamental business concepts, such as investment and ROI. By offering a hands-on, project management-based approach, the platform enables children to actively engage with and apply real-world business practices. Additionally, it simplifies access for users and educational institutions, ensuring a seamless learning experience without the need for complex installations or device-specific configurations. Through this work, we aim to foster financial literacy, entrepreneurial skills, and independent learning in a user-friendly and practical way.

Simplify business education for children

Easy to action business concept

Easy to understand business concept

User friendly interface

Action-oriented learning experience

Little PM Platform

User friendly financial literacy

Easy to access and to achieve the result

Easy to access financial literacy

Promote financial literacy and entrepreneurial skills

Enhance accessibility

The Venn diagram above shows the intersection between 5 pillar of this thesis to achieve the objective of this portal:

* **Simplify Business Education for Children**: This point overlaps with **Promote Financial Literacy and Entrepreneurial Skills,** as simplifying business education inherently involves teaching these concepts. It also overlaps with **Provide a User-Friendly Interface**, as the platform needs to be easy for kids to understand.
* **Offer an Action-Oriented Learning Experience**: This point intersects with **Simplify Business Education for Children and Promote Financial Literacy**, as the action-oriented approach is meant to teach these skills through practical tasks. It also overlaps with **Provide a User-Friendly Interface** to ensure that the tasks are engaging and accessible for children.
* **Enhance Accessibility**: This point overlaps with **Provide a User-Friendly Interface**, as both aim to ensure ease of access and navigation for children. It also intersects slightly with **Simplify Business Education for Children**, as easier access supports better educational experiences.
* Promote Financial Literacy and Entrepreneurial Skills: This overlaps with **Simplify Business Education for Children and Offer an Action-Oriented Learning Experience**, as the platform's goal is to teach these skills in a practical and understandable way. It also intersects with **Provide a User-Friendly Interface** to ensure the concepts are easily grasped by children.
* **Provide a User-Friendly Interface**: This point overlaps with all the others, as the usability of the platform impacts the ability to simplify education, offer action-oriented experiences, enhance accessibility, and promote financial literacy.

Scope of Work:

This thesis will cover the development and key features of an online web-based platform designed to guide children through the process of launching a business in 7 days. The following aspects of development, application features, and technical requirements will be addressed:

|  |  |  |
| --- | --- | --- |
| **#** | **In Scope** | **Description** |
| **1** | **Web-Based Platform Development** | * Creation of an accessible, browser-based application that is easy to use for children without the need for downloads or installations. * **Front-End Development**: A child-friendly interface designed for kids to easily navigate and engage with the business launch framework. * **Back-End Development**: Robust back-end infrastructure to handle data management, user interactions, and task progression. * **Database Design**: Development of a database to store user data, task progress, business ideas, and other key application information. |
| **2** | **Framework for 7-Day Business Launch** | A structured, action-oriented framework that guides children through a business launch in 7 days, with daily tasks and activities designed to teach key entrepreneurial skills. |
| **3** | **Video Glossary** | Integration of a **video player** to support the video glossary, allowing children to easily access and watch short videos explaining key business terminology and steps in the business launch process. |
| **4** | **Diverse Business Ideas** | Development of several different business ideas that children can choose from, all built on top of the core 7-day framework |
| **5** | **Downloadable Templates and File Generation** | * **Pitch Deck Template**: A downloadable pitch deck template for children to present their business idea. * **Marketing Material Template**: Ready-to-use templates for creating marketing materials for their business. * **ROI Calculation Template**: Tools and templates to help calculate return on investment. * **Accounting Template**: A basic accounting template for tracking business expenses and revenue. * **File Generation**: Automated generation of files (e.g., PDFs or editable documents) based on user inputs into the provided templates. The platform will allow users to download customized pitch decks, marketing materials, ROI, and accounting sheets. |
| **6** | **User Registration and Parental Consent** | * A registration system for children, requiring **parental or legal guardian consent** for kids to use the platform. This includes a legal agreement that parents or guardians must approve, ensuring compliance with child protection and privacy regulations. * Optionally, parents or educators can track progress and provide guidance, but the primary focus is on securing consent for children to engage with the platform independently. |
| **7** | **Questionnaire for Identifying Strengths** | A questionnaire designed for kids to identify their strengths, which helps guide them toward choosing the most suitable business idea. |
| **8** | **Budget Calculation** | A budgeting tool that calculates the required investment based on the selected business idea, available resources, and other factors. |
| **9** | **Task Automation and Learning** | Automated task assignment and progress tracking for the 7-day business framework, making it easy for children to stay on track and meet milestones |
| **10** | **Technical Requirements** | * **Video Player Integration**: Support for an embedded video player to enable children to access educational video content easily within the platform. * **File Generation System**: Automated file generation based on user inputs into templates (e.g., pitch decks, marketing materials, ROI calculations), with downloadable PDF or editable file formats. |
| **11** | **Pilot Phase** | A pilot phase involving 1-2 school classes, with a maximum of 40 children, to test the platform’s effectiveness, usability, and learning outcomes. Feedback will be collected from students and educators to further refine the platform |
|  | **Out of scope** |  |
| **1** | **Adhering to legal requirements such as COPPA and GDPR-K** | Full compliance with complex legal requirements like COPPA and GDPR-K, which govern children's data privacy, will be postponed |
| **2** | **Content management system (CMS)** | The pilot version will not include a full-fledged CMS for managing video glossary and educational content |
| **3** | **Parental control and monitoring** | Features allowing parents to monitor their child’s progress and receive updates will not be part of the pilot |
| **4** | **Accessibility standards** | Compliance with accessibility standards, such as WCAG (Web Content Accessibility Guidelines), will be out of scope |
| **5** | **Support and maintenance** | Instead of ongoing support and maintenance, the team will provide only **hypercare** during the pilot phase |
| **6** | **Multilingual support for accessibility in different regions** | The platform will be available only in a single language during the pilot |
| **7** | **Full compliance with legal requirements for handling children’s data** | Although basic data security features will be included, full legal compliance for handling children's data will not be achieved in the pilot phase |
| **8** | **Backup and Disaster Recovery** | A robust backup and disaster recovery system to prevent data loss will not be included |
| **9** | **Security** | Basic security rules will be implemented to provide a minimum level of data protection. |

Each of these features and technical elements will contribute to the overall goal of teaching children the fundamentals of entrepreneurship through a practical, hands-on approach, while also ensuring that the platform is user-friendly, technically sound, and educationally effective.

Thesis Structure: Briefly describe what each chapter of the thesis will cover. We will write it later after having all chapters

Literature and Similar Applicatrions Review

Financial literacy education for children is increasingly recognized as crucial for future financial well-being. Research shows that school-based programs can improve children's financial knowledge and attitudes (Amagir et al., 2018). Effective methods include experiential learning, giving allowances, teaching savings habits, and involving children in shopping (Saputra & Susanti, 2021; Amagir et al., 2018). Studies suggest focusing on age-appropriate concepts, such as basic monetary exchange for preschoolers and specific life events for college students (Holden et al., 2009; Amagir et al., 2018). Technology plays a complex role in children's financial literacy, with co-design studies revealing children's perspectives on digital finance (Yip et al., 2023). Factors like socioeconomic status and religiosity can influence children's financial literacy levels (BenDavid-Hadar & Hadad, 2013). To be effective, financial education should align with children's cognitive development, fostering executive function, savings beliefs, and self-efficacy at appropriate developmental stages (Drever & Else-Quest, 2021).

Financial literacy applications for children have gained attention as effective tools for teaching money management skills. Several studies have explored the development and effectiveness of such apps. Kintan Sekar Adinda & Ginar Santika Niwanputri (2021) designed a gamified mobile app for adolescents, which proved effective and motivating. Similarly, Nurhanani Romli et al. (2021) found that technology acceptance was high among preschool children using financial literacy apps. Game-based learning applications have been developed for elementary school students (Suprananto & Hikamudin, 2023) and rural communities in developing countries (Warder et al., 2018). Interactive web applications have also been created for teaching financial concepts in schools (Pšenák et al., 2019). Some apps focus on synergizing parental and teacher efforts in fostering financial literacy (Risna et al., 2023), while others incorporate microlectures and gamification (Samonte et al., 2017). These studies highlight the potential of technology-based solutions in enhancing financial literacy among children and adolescents.

Financial literacy education for children is increasingly recognized as crucial for developing financially capable citizens (Mitchell & Abusheva, 2016; Appleyard & Rowlingson, 2012). Challenges include the growing complexity of financial decisions, lack of knowledge, and overconfidence (Mitchell & Abusheva, 2016). Technology-based teaching methods, such as mobile applications, can be effective tools for financial education (Romli et al., 2021; Adinda & Niwanputri, 2021). However, implementing financial education in schools faces obstacles like the need for teacher training and addressing diversity issues (Appleyard & Rowlingson, 2012). Early financial education can boost economic growth and stability, but requires additional resources and specialized teachers (Sabirin et al., 2023). Co-design studies with children reveal complex relationships between youth and money in the digital world, highlighting the need for more child-computer interaction research in financial literacy (Yip et al., 2023). Evaluating the effectiveness of financial literacy programs for young children remains a challenge (Holden et al., 2009).

Research suggests that entrepreneurship education can be effectively introduced to children from an early age. Studies have shown that children can acquire and apply entrepreneurial knowledge, developing business plans and skills through tailored programs (Javier Damián Simón, 2015; Elizabeth A. McCrea, 2013). Games and simulations have proven valuable in teaching business skills to young learners (Georgi Tsvetanov, 2020). Early exposure to entrepreneurship concepts can foster important personal characteristics and increase children's entrepreneurial intentions (A. Paço & Maria João Palinhas, 2011; Nurhafizah Nurhafizah, 2018). However, research has revealed that childpreneur activities are often gendered, with boys and girls gravitating towards stereotypical endeavors (Gloria L. Sweida & Morgan D. Tallman, 2021). ~~While businesses increasingly recognize children as stakeholders and consumers, ethical concerns persist regarding marketing practices targeting young audiences (S. Horgan, 2005).~~ Implementing entrepreneurship programs for children requires careful planning and age-appropriate activities to ensure effective learning outcomes (Dellia Mila Vernia & Sigit Widiyarto, 2023).

Research indicates that guided applications and programs can effectively help children develop entrepreneurial skills and knowledge from an early age. Studies have shown that children can acquire and apply entrepreneurship concepts through structured programs like "My First Business" (Javier Damián Simón, 2015) and technology-based initiatives such as the EFKIDS application (Riska Aprilianti et al., 2021) and EMVKids virtual world platform (Ângela Pereira et al., 2017). These approaches often incorporate experiential learning methods (Sheellyana Junaedi & T. Widiastuti, 2020) and gamification (Georgi Tsvetanov, 2020) to engage young learners. Early entrepreneurship education can foster important skills like self-understanding, emotional control, and decision-making (Nurhafizah Nurhafizah, 2018). Implementation strategies include integrating entrepreneurship into school curricula, organizing special events like "market days," and utilizing educational apps (Dellia Mila Vernia & Sigit Widiyarto, 2023; Raquel Gómez-Díaz et al., 2015). While challenges exist, these initiatives show promise in developing children's entrepreneurial mindset and abilities.

Similar applications or solutions in the market or academia and how they compare to your application.

When considering existing applications in the market that teach entrepreneurship to children, several platforms have similar goals but vary in approach and execution. Programs like **VentureLab** focus on cultivating entrepreneurial mindsets through interactive lessons and real-world activities, while **Kidpreneurs Academy** provides a self-paced, online course to help children aged 6-12 understand business fundamentals through fun and engaging exercises. Both platforms share the objective of introducing kids to entrepreneurship but emphasize different aspects of learning, such as creativity, resilience, and business planning.

On the other hand, **Startup Wars** and similar business simulation games offer a competitive environment where children can develop decision-making and strategy skills by managing virtual businesses. These simulations allow children to experiment with pricing, supply chain management, and product development in a controlled, game-like setting, making the learning process engaging but largely theoretical.

|  |
| --- |
| **VentureLab** <https://venturelab.org> |
|  |
| * **Description**: A non-profit organization that provides entrepreneurship education through fun, hands-on lessons and activities. VentureLab focuses on building an entrepreneurial mindset for kids, particularly promoting creativity and resilience. * **Key Features**: Offers both in-person and online programs, including resources that can be accessed for hybrid or remote learning. Programs include pitch events, mentorships, and summer camps. * **Similarities**: Both platforms aim to provide a structured, step-by-step framework for teaching entrepreneurship to kids. * **Differences**: VentureLab has a broader focus on mindset development and social skills, while your platform emphasizes business launch and ROI calculation over a 7-day framework. |

|  |
| --- |
| **Kidpreneurs Academy** <https://kidpreneurs.org> |
|  |
| * **Description**: A popular online course designed for children aged 6-12, offering real-world concepts about entrepreneurship that are often not covered in school. Kidpreneurs Academy teaches children how to start a business, create a simple business plan, and market their product. * **Key Features**: Kids learn to brainstorm ideas, budget, and implement simple marketing strategies. The course offers a step-by-step guide to launch a small business. * **Similarities**: Like your platform, it focuses on practical skills with a hands-on approach. * **Differences**: Kidpreneurs Academy is a Udemy course with a focus on self-paced learning, while your platform is more interactive with a daily task framework and additional downloadable templates. |

|  |
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| **Startup Wars** <https://www.startupwars.com/simulation-resources/5-online-business-games-for-students/> |
|  |
| * **Description**: A business simulation game where students create virtual startups and compete within an economy, making strategic decisions about pricing, supply chain management, and customer satisfaction. * **Key Features**: Includes a tutorial system, decision-making challenges, and a grading platform to track entrepreneurial success. * **Similarities**: Both platforms focus on active engagement and decision-making as part of the learning process. * **Differences**: Startup Wars is more focused on simulation and competition, while your platform is structured around real-world business launch processes. |

The platform developed in this thesis stands out from existing solutions in several significant ways. Firstly, it adopts an **action-oriented framework** by offering a structured, 7-day program that results in a tangible business launch. Unlike other platforms that often focus on theoretical concepts or business simulations, this platform emphasizes real-world application, allowing children to engage in practical tasks rather than abstract lessons.

Moreover, the platform incorporates **simplified ROI and investment calculations**, making it easier for children to understand and apply key financial principles. While many other platforms introduce general entrepreneurship concepts, they often lack tools that simplify complex financial calculations. By providing accessible tools for ROI calculation and budgeting, this platform ensures that children can independently grasp essential financial elements without relying on parental or external support.

In contrast to other platforms that may require offline teaching materials, additional courses, or instruction books, this platform offers **day-by-day guided instructions** that are easy for children to follow without the need for a teacher or instructor to help them complete the final business project. The step-by-step structure is designed to allow kids to work through the tasks independently, leading them to launch their business without the need for additional educational resources or supervision. This self-guided approach makes it uniquely practical for both home and school environments, offering flexibility and simplicity for users.

By combining practical business launch activities, user-friendly financial tools, and an independent, easy-to-follow framework, this platform offers a more comprehensive and effective solution compared to competitor platforms. It bridges the gap between theoretical learning and real-world entrepreneurship, providing a hands-on, engaging experience that better equips children with entrepreneurial skills.

System Requirements

**Functional Requirements**

The functional requirements of the web-based platform outline the core functionalities necessary to guide children through the process of launching a business in 7 days. These include a **user registration and authentication system**, allowing children to register while ensuring that parental consent is securely handled. A **dynamic dashboard** is essential for tracking the user’s progress across the 7-day business journey, offering clear visibility of tasks completed and pending.

The platform also requires functionality support video glossary integration, where educational videos are embedded to explain business terminology in child-friendly language. Additionally, the platform must feature **dynamic forms** that allow children to input necessary details such as business choices, budget figures, and job assignments.

Another core functionality involves **file generation and export**, where users can generate customized pitch decks, marketing materials, and profit-and-loss reports based on the information they input into templates. The platform must also include **automated task assignment** that presents daily tasks in sequence, guiding children through each step with notifications to prompt completion. **Financial calculations** for budget and ROI calculations must be integrated, providing live feedback as the child inputs investment and expense data.

The platform's functional requirements include core features divided into two distinct areas: the **7-day business framework** realization and the **configurable business ideas**. The 7-day framework provides a structured sequence of tasks, guiding users from concept to business launch, while the business ideas are configurable and can be adjusted independently within the platform’s database.

**Configurable Business Ideas:**

**…**

**7-Day Business Framework**

Business idea - 1

Business idea - 2

Business idea - n

**7-Day Business Framework Realization:**

The 7-day framework is a core part of the platform, with each day representing a distinct stage of the business launch process. The framework includes the following key components:

1. **Daily Task Progression**:
   * Each day of the business launch is structured with specific tasks (e.g., choosing a business type, creating a budget, assembling a team). These tasks are tied to templates and instructions configured in the database.
   * Backend logic ensures that users progress through each stage in sequence, with the option to save progress and return later.
2. **Dynamic Content for Each Day**:
   * Content and instructions for each day are pulled dynamically from the database. This allows the same core framework to be applied across various business ideas.
   * For example, Day 1 introduces business types, Day 2 focuses on budget planning, Day 3 on resource allocation, etc., with content being automatically adapted based on the selected business type.
3. **Task-Specific Templates**:
   * Each day is associated with specific templates, such as budget templates for Day 2, job assignment templates for Day 3, and marketing material templates for Day 6. These templates are pre-configured in the database and populated with user data as they progress.
4. **Task Automation and Notifications**:
   * Automation ensures that the system tracks user progress and sends reminders or notifications for upcoming tasks. This feature helps children stay on track and complete their 7-day business journey.

**Configurable Business Ideas:**

Business ideas within the platform are designed to be flexible and easily updated or changed independently of the 7-day framework. Each business idea follows the same framework but provides customized content and data inputs.

1. **Business Idea Configuration**:
   * Each business idea is a configurable element in the database, with its own unique data (e.g., required investment, team size, product type). This allows for a variety of business scenarios to be implemented without altering the core framework.
   * For example, one business idea might focus on a simple toy-making business for younger children, while another could involve a more complex service-based business for older users.
2. **Business-Specific Templates**:
   * Templates such as the pitch deck, marketing materials, and ROI calculations are pre-configured for each business idea, allowing for seamless adaptation to different business types.
   * The platform pulls these templates dynamically based on the selected business idea, while the structure and functionality of the templates (e.g., PDF export) remain consistent.
3. **Dynamic Content Loading**:
   * The platform loads content and instructions specific to the selected business idea at each stage of the 7-day framework. For instance, the investment options and budget breakdown for a toy-making business will differ from those for a service-based business but will be delivered through the same framework.
4. **Database Management for Business Ideas**:
   * Business ideas are managed within the platform’s database, where administrators can easily add, remove, or update ideas without affecting the 7-day task flow. This allows for scalability and easy maintenance as new business concepts are added.

By segregating the **7-day framework realization** from the **business idea configuration**, the platform ensures flexibility in terms of both user experience and content management. The core framework remains consistent and actionable across various business ideas, while the content for each business type can be independently configured and customized via the database. This architecture allows for scalability and ease of updating business ideas without altering the platform's overall functionality.

1. **User Registration and Authentication**:

* User registration form with child and parental information input (name, email, phone).
* Secure login system with password encryption and parental consent.

1. **User Dashboard**:

* Display of a 7-day task progress tracking.
* Visual representation of completed and pending tasks/days.

1. **Content Management System for Video Glossary**:

* Integration of video player for business terminology explanations.
* Backend system for uploading, categorizing, and managing video content. Mainly database links?

1. **Form Management and Input Handling**:

* Dynamic forms for choosing business types, budgeting, assigning job roles, and more.
* Validation for user inputs (e.g., numeric fields for investment amounts).

1. **Templates and File Generation**:

* Pitch deck, marketing materials, and ROI calculation templates.
* File export functionality (PDF/Word?/PNG/JPEG) based on user inputs.

1. **Task Automation**:

* Daily task assignment and tracking for each of the 7 days.
* Notifications and reminders for task completion.

1. **Questionnaire System**:

* Questionnaire for identifying the child’s strengths and business preferences.
* Data analysis to recommend suitable business ideas.

1. **Data Storage and Management**:

* Database for storing user progress, task completion, and financial data.
* Storage of parental consent forms and data.

1. **Financial Calculations Integration**:

* Canculations for budget and ROI calculations with live feedback on financial inputs.

1. **Reporting and Downloadable Results**:

* Generation of sales reports and P&L statements with downloadable functionality.

**Non-Functional Requirements**

In addition to core functionalities, the platform must meet several non-functional requirements to ensure it is secure, reliable, and user-friendly. **Performance** is key; the system must handle multiple users concurrently without experiencing significant performance issues, ensuring that the video glossary, forms, and task management system all load quickly and efficiently.

The platform also requires **scalability**, allowing it to accommodate growth in both the number of users and the data generated. This includes scalable video streaming capabilities and a data infrastructure that can grow as the user base increases. **Usability** is another critical non-functional requirement, particularly since the platform is designed for children. The interface must be intuitive, with easy navigation and clear instructions, minimizing the need for adult assistance. It must also comply with **accessibility standards** to ensure that children with disabilities can use the platform effectively.

The system must be **reliable**, with minimal downtime and a robust backup and disaster recovery system in place to prevent data loss.

1. **Performance**:

* The platform must be able to handle multiple users simultaneously without performance degradation. For the pilot it is 40 users registered.
* Fast load times for forms, video glossary, and report generation.

1. **Scalability**:

* Scalable infrastructure, application archirecture, and technologies to support future growth in the number of users and data storage requirements.
* Ability to scale data processing as the user base increases.

1. **Usability**:

* Intuitive, child-friendly user interface with easy navigation.
* Simple, step-by-step guided tasks requiring minimal adult intervention.

1. **Accessibility**:

* Fully responsive design, accessible from desktops, tablets, and mobile devices.

1. **Reliability**:

* High availability with minimal downtime, ensuring the platform is available for use at all times.

1. **Security**:

* Basic security rules will be implemented to provide a minimum level of data protection.

1. **Legal and Compliance**:

* Basic legal requirements for handling children’s data, mainly parental consent.
* Auditing features to track parental consent and data use for compliance purposes.

1. **Hyper care support during pilot**:

* Hyper care technical support for users (children, parents, and educators) during pilot.
* Updates to the platform for feature improvements and bug fixes during the pilot.

**Out of Scope Functionalities**

Due to time and resource limitations, certain functionalities will not be implemented in the pilot phase. The following features will be excluded:

1. **Adhering to Legal Requirements such as COPPA and GDPR-K**:
   * Full compliance with children's data protection laws (COPPA and GDPR-K) will be postponed. Only basic parental consent mechanisms will be implemented, without full legal coverage.
2. **Content Management System (CMS)**:
   * A comprehensive CMS to dynamically manage the platform’s content will not be included. All content will be pre-defined and managed manually during the pilot.
3. **Parental Control and Monitoring**:
   * Parental monitoring tools and dashboards will not be available in the pilot. Parents will not have access to view or track the child’s progress.
4. **Accessibility Standards**:
   * The pilot will not comply with accessibility standards, such as WCAG, leaving features designed for children with disabilities out of scope.
5. **Support and Maintenance**:
   * Ongoing support and maintenance will be excluded, with only **hypercare** offered during the pilot to address immediate issues.
6. **Multilingual Support**:
   * The platform will be developed in a single language, without support for multiple languages or regions.
7. **Full Legal Compliance for Handling Children’s Data**:
   * Advanced legal requirements for data handling, including data encryption and retention policies, will not be fully implemented. Only basic security measures will be in place.
8. **Backup and Disaster Recovery**:
   * A robust backup and disaster recovery system to prevent data loss will not be included. Only basic security protocols will be applied to mitigate the risk of data loss during the pilot phase.
9. **Security**:
   * Full security measures, such as end-to-end encryption for data transmission and storage, will not be applied. Regular security updates and vulnerability assessments will also not be conducted during the pilot phase. Basic security rules will be implemented to provide a minimum level of data protection.

The blend of functional and non-functional requirements in this platform ensures a well-rounded and effective learning experience for children as they embark on their entrepreneurship journey. The **functional requirements** provide the core functionalities that guide users through the 7-day business launch framework, including dynamic content management, user registration, daily task automation, and financial tools like ROI and budget calculations. These features create a structured, practical approach to learning, allowing children to independently progress through the business creation process.

On the other hand, the **non-functional requirements** ensure that the platform performs efficiently, remains scalable, and adheres to basic security and usability standards. Although accessibility and legal compliance will be fully addressed in future iterations, the pilot will implement basic usability and performance standards to guarantee that users can engage with the platform seamlessly.

Lastly, the platform's **out of scope functionalities**—including full security measures, parental monitoring, and advanced legal compliance—have been deferred to future phases due to time and resource constraints. While these elements are essential for the long-term sustainability and security of the platform, they will not be included in the pilot phase, which will focus on delivering the essential learning framework for children to experience entrepreneurship in a guided, hands-on way.

This strategic prioritization ensures that the core educational objectives are met while leaving room for growth and improvement in future iterations of the platform.

* + Stakeholders and User Personas: Define the primary users and stakeholders of the application. – I’m writing this part now together with use case diagrams.