
Software Requirements Specification

for

Play, Learn & Protect: Technology for Childhood & Youth

Version 1.0 approved

Prepared by **Nouran Ashraf**
Muna Abdulcadir
Reem Fawzy
Nour Mohamed
Nour Ghonim

RE_ENGINEERS

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Revision History

Name	Date	Reason For Changes	Version
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1. Introduction

1.1 Purpose

This Software Requirements Specification (SRS) document defines the complete functional and nonfunctional requirements for our Play, Learn, and Protect platform (aka PLP) which is an online platform designed specifically for children with the age range 3-12 years in Egypt.

Our PLP platform addresses three critical needs:

1. Strengthen imagination and social skills through playful and gamified experiences.
2. Deliver learning experiences with great impact on children through serious, academic games that cover curriculum topics.
3. Ensure digital safety by enabling parents and educators to monitor children.

This Document is intended for stakeholders, project managers, developers, testers, documentation writers and all team members who will be involved in the design and development of our PLP platform. It provides detailed specifications for all of our system's features, user requirements, and acceptance criteria.

1.2 Document Conventions

Requirement Identificaion:

- All functional requirements are identified in the following form: “REQ-” followed by the distinct number of the requirement.
- For non functional requirements we use the form: “NFREQ-” followed by the requirement’s unique number.
- As for user stories they use: “As a (user type here), I need to (mentions action and benefit from it).

Priority Levels (of the requirements):

- High (H): “must” be implemented in the first release. Without it the system is unusable.
- Medium (M): “should” be implemented. There will be gaps in user experience without it.
- Low (L): nice to have. Enhances user experience but the system can definitely function without it.

Requirement Status:

- Approved: Requirement is completed and ready to be developed.

- TBD: To Be Determined. Additional information needed before implementation.
- Proposed: still under consideration, may change based on feedback from stakeholder

1.3 Intended Audience and Reading Suggestions

Developers and Technical Teams:

Start with section 2 “Overall Description” for context, then go to section 3 “External Interface Requirements” and section 4 “System Features and Requirements” for technical specification.,,

Project Managers:

Read Section 1 “Introduction”, section 2 “Overall Description” and section 5 “nonfunctional Requirements” to understand the project scope.

Stakeholders:

Read section 1 “Introduction” and section 2 “Overall Description” for an overview. You can after that review the specific system features in section 4 which are relevant to business goals.

Testing Team:

Focus on section 4 “System Features” where for each requirement an acceptance criteria is mentioned and section 5 “Nonfunctional Requirements” for quality metrics and test procedures.

End Users (Parents and Educators):

Focus most on section 4.4 and section 4.9.

Overall Recommended Reading Sequence:

1. Section 1 “Introduction”
2. Section 2 “Overall Description”
3. Your role-specific section from Section 3-5
4. Appendix B (Models) for visual understanding
5. Appendix A (Glossary) for reference

1.4 Product Scope

The **Play, Learn & Protect (PLP)** platform is a web-based, educational and safety-driven platform designed for children aged 3-12 in Egypt. The platform has games tailored to each age range and their development. The platform aims to provide children with a culturally relevant, developmentally appropriate, and secure platform where they can play, learn, and be protected while competing and engaging with each other. This platform has three goals it aims to achieve: play-: offer a set of family friendly, cultural sensitive games that foster imagination and social skills, learn-: it aims to not only bring serious, curriculum-based games but deliver impactful learning experiences covering early physics, math, chemistry, languages and coding, Protect-: the platform will have advanced digital safety feature, with algorithms that will recognize online threats such as cyberbullying detection alerts and inappropriate/explicit content alerts, the platform will generate appropriate alerts for the children that aim to teach safe behaviors rather than simply blocking the content. It will have a monitoring module for both the parents and the educators to observe screen-time patterns and excessive gaming. The dashboards will visualize the time spent, types of content accessed, and the frequency of the sessions.

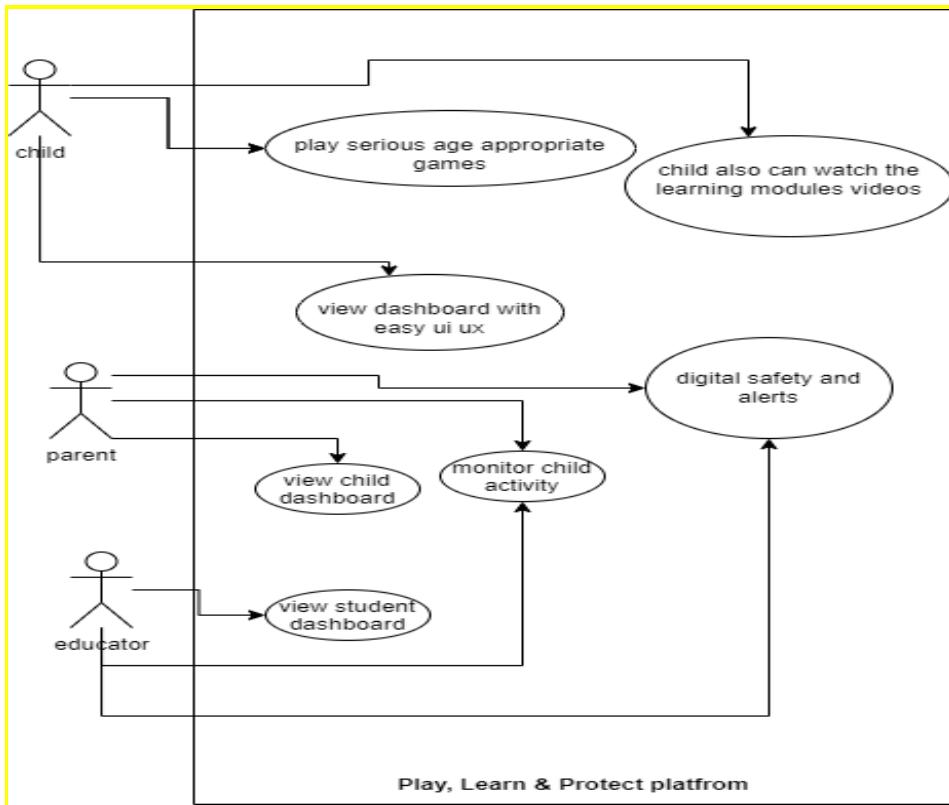
1.5 References

Reference	Title	Date	Source
IEEE Std 830-1998	IEEE Recommended Practice for Software Requirements Specifications	1998	IEEE Computer Society, ISBN: 0-7381-0332-2`

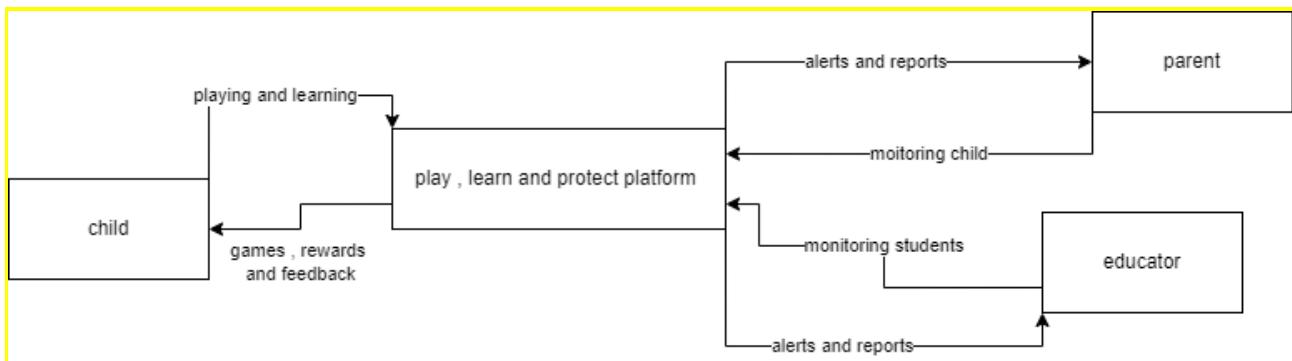
2. Overall Description

2.1 Product Perspective

Play, Learn & Protect is a new, self-contained educational software platform designed to support the learning, creativity, and digital well-being of children. It does not replace any previous system; rather, it introduces an integrated solution that brings together playful interaction, impactful education, and safe digital engagement within a single environment.



2.2 Product Functions



- FR_1: As an educator I have access to monitor children enrolled in my learning module(s).
- FR_2: As an educator I can access the dashboard of children enrolled in my learning module(s).
- FR_3: As an educator I can create a learning module .
- FR_4: As an educator I have the ability to edit a module I already created.
- FR_5: As a child, I want to play games that suit my age, in order for me to enjoy playing without seeing content that is too hard or inappropriate.
- FR_6: As a child, I want to access lessons uploaded by educators that match my age, in order for me to learn in a way that matches my level.
- FR_7: As a child, I want to see my personal dashboard to see my information and activity, in order for me to understand my progress and what I have done so far on the platform.

FR_8: As a child, I want to be able to see the leaderboard, so that I can compare my achievements with other and be motivated.

FR_9: As a parent, I want to receive alerts in case my child exceeds the allowed screen time, in order for me to manage my child's usage for the platform.

FR_10: As a parent, I want to track my child's usage patterns and be able to view their achievements on the leaderboard, in order for me to follow their progress.

2.3 User Classes and Characteristics (to be checked)

The users of the ***Play, Learn & Protect*** platform include end-users, such as children from different age ranges, their parents, and educators.

User Class	Rationale
Children	<ul style="list-style-type: none"> Primary users of the platform, typically aged 3-12, and have very low technical expertise. They require a highly intuitive and visually engaging interface with minimal reading or navigation complexity as their experience with digital platforms is typically limited. Their education level varies by age, so content must be age-appropriate. Children have the lowest security or privilege level, with restricted access to safety settings, reports, and administrative features. Most frequent users, engaging daily with educational games, creative learning tools, achievements, rewards, challenges, and gamified dashboards. The most important user class as the platform revolves around their learning, playing, and safety needs.
Educators	<ul style="list-style-type: none"> Educators are professional users with moderate technical expertise, comfortable navigating dashboards and interpreting analytics. They generally have formal educational backgrounds in teaching or child development and are experienced with digital learning tools including tracking student progress. High security or privilege level, which allows them access to monitoring dashboards and behavioral analytics, though they do not control platform-wide safety policies. Educators use the platform moderately, primarily during review sessions where they access the monitoring module to observe screen-time patterns and digital behavior including cyberbullying, inappropriate content, or excessive gaming. Highly important users because they directly support educational outcomes and proper engagement with the platform.
Parents	<ul style="list-style-type: none"> Parents are adult users with varying technical expertise, ranging from low to moderate, so the interface must be straightforward and accessible to all skill levels. They have general educational backgrounds and limited experience with educational analytics necessitating clear, visual dashboards. Parents hold the highest security and privilege level, managing safety settings, receiving

	<p>alerts, and overseeing their child's digital behavior.</p> <ul style="list-style-type: none">• Their use is low to moderate, typically during report reviews, or when alerts are triggered.• Parents primarily use functions such as behavior monitoring, screen-time reports, safety settings, and alerts for cyberbullying, or inappropriate content.• An important user class, ensuring trust, consent, and continued adoption of the platform.
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2.4 Operating Environment

The system is a web-based platform that will work through a standard internet browser. It can be used using devices such as desktop computers, laptops, tablets, and smartphones.

The platform should work on popular operating systems including Windows, macOS, Android, and iOS. Users will not need to install any special software, because the system can be used directly through web browsers such as Google Chrome, Mozilla Firefox, Microsoft Edge, and Safari.

A stable network is required in order for the system to work properly. No special hardware components are needed, and the system is designed to work in parallel with other applications on the user's device without causing conflicts.

2.5 Design and Implementation Constraints

The system should show parents students screen time and their activity on the website and every day data should be updated automatically and stored in order to compile a weekly and daily report for parents and educators .This stored data should compile and support analysis of time spent,what was accessed and engagement time.Since the platform's intended use is in Egypt , the system must be able to provide Egyptian as one of the languages on the website for children and parents.All content related to the kids use should only be shown and accessed by teachers and parents no third party should be allowed to access this information as it will be considered a privacy leak.

User Documentation

- Any complications related to the website functionality there will be an online staff available for assistance within the platform and contact details will be provided.
- A user tutorial for parents and educators to access the dashboards, manage the child's account and monitor the frequency of sessions
- Child friendly tutorial on how to use the platform and the learning game features
- If there occurs a problem there will be a guide provided on how parents and students will be able to contact the teacher for guide and an option will be available also on that contains contact details of the related teachers subject via email.

2.6 Assumptions and Dependencies

Assumptions

- *The platform assumes users have access to a stable internet in order to use the web platform*
- *Parents and educators actively participate to monitor students engagements on the dashboard*
- *It assumes that kids under a certain age will be supervised by a parental figure or an educator*
- *It is assumed that kids have a basic literacy skills to able to use the functionalities of the website correctly*

Dependencies

- *Communications between parents or students with teachers are based on external factors such as emails*
- *System depends on the availability of the web browser to be able to facilitate multiple web platforms across different devices*
- *Educational platform content and games is depends on the accuracy of the curriculum of their age group*

3. External Interface Requirements

3.1 User Interfaces

- **Parent Interface:**

-Dashboard:

.Dashboard shows all your children ,and cards with the total amount of children you have, with total minutes across all children screen time, total number of unresolved alerts and number of active sessions

.The dashboard contains a children list , each child having a card with their avatar , displaying name , username , level , total points and current streak.

.Each child have a view dashboard to view their detailed dashboard

.There is a add child cart to register your child account

.There is “Recent Achievements” which shows the latest achievements from all their children

.The dashboard is accompanied by a navbar containing :dashboard , Games , Learning , monitoring , safety

Welcome Back, Zara!

Here's what's happening with your children today

Total Children	Screen Time Today	Unresolved Alerts	Active Sessions
2	218m	0	3

Your Children

Child	Level	Points	Streak	Recent Activity
Muna (@munal123)	1	705	1	1 days
Nour (@nour245)	1	375	1	1 days

Add Child

-Monitoring page:

- .Parent have child selector drop down with time period selector (7 days , 30 days , 90 days)
- .Shows quick stats -> total screen time , activities completed , modules completed , safety score
- .screen time breakdown -> games / learning / creative with progress bars
- .learning progress-> games completed , average score , modules completed
- .safety summary -> safety score , total alerts , and unresolved alerts

-safety page:

- .overall risk score (low / medium / high)
- .unresolved alert , content flags , safety score , filter level
- .alert list: severity , data , title , messages , educational tips
- .actions that can be taken: mark alerts as resolved , view details

- **child interface**

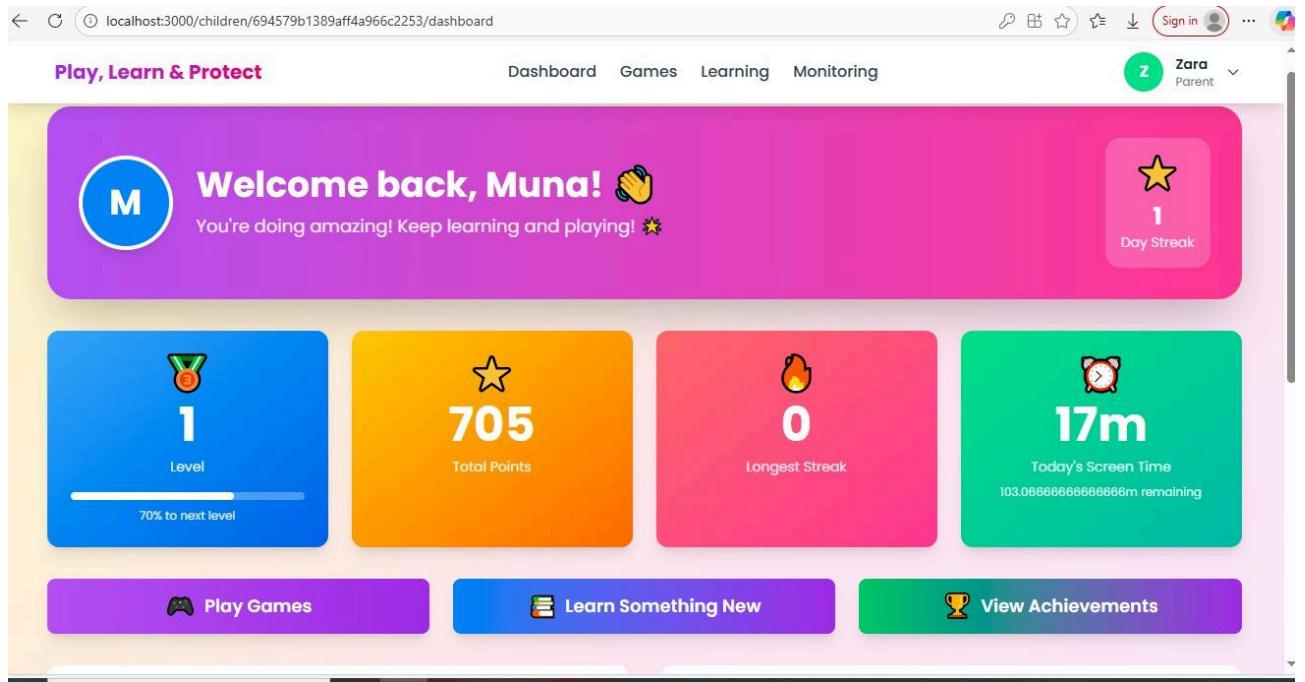
- dashboard:

- .cards with level of progress , total points , longest streak achieved , screen time (the total time spent that day and the time remaining) (the max screentime is 120 minutes then it sends an alert)

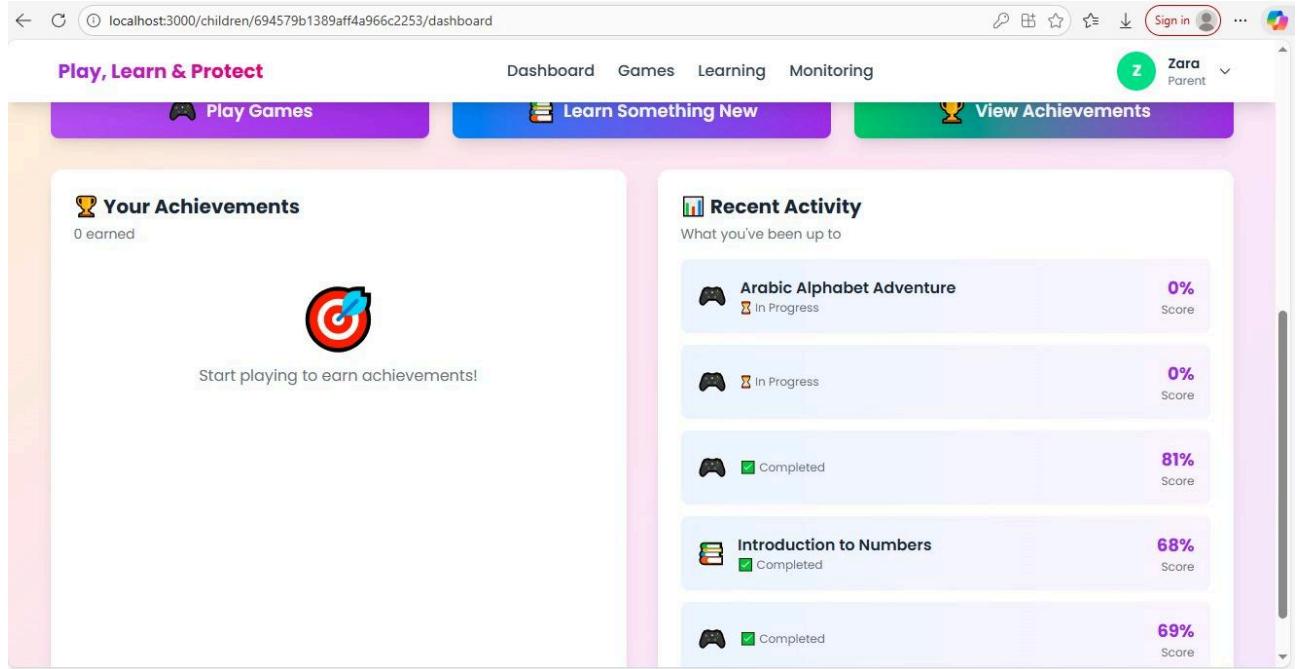
- .buttons that will take you to other pages : play games (go to games page) , learn something new (takes you to learning modules) , view achievements -navigate to leaderboard / achievements

- .achievements : list of earned achievements with dates -empty state if there are none-

- .recent activity -> recent games and learning modules played , with their status (complete / in progress) and scores -empty if none-



The child's dashboard with easy ui ux to navigate through



The child's recent activities , and the achievements received

- **Educator interface:**

-Dashboard:

- .has their own labels , they have the total students in their learning modules
- .they can view the total amount of students , screen time , alerts and active sessions
- .in their student list , there is a card layout showing each student's progress

- .displays the recent achievements of all their students
- monitoring and safety page:
- Has the same parent breakdown in their monitoring page but for their students
- .can resolve alerts where applicable

The screenshot shows the 'Monitoring Dashboard' interface. At the top, there's a header with the 'Play, Learn & Protect' logo and navigation links for Dashboard, Games, Learning, and Monitoring. A user profile for 'Nour Ahmed Teacher' is also at the top right. The main area is titled 'Monitoring Dashboard' and has a sub-instruction 'Track your children's activity and progress'. It features two dropdown menus: 'Select Child' and 'Time Period' (set to 'Last 7 Days'). A prominent button labeled 'View Detailed Report →' is in a blue box. Below these is a large white box containing a bar chart icon and the text 'No data available' followed by 'Add a child to start monitoring'.

This is the monitoring page for the educator -teacher- where they will have a breakdown of the students stats , and they can filter through the data

3.2 Hardware Interfaces

Because the system is a browser-based platform, it does not require any interaction with specialized hardware components, so hardware interfaces are limited to the standard user. It operates on the standard user's devices such as desktop computers, tablets, laptops, and smartphones. User interactions are performed through common hardware interfaces, including display screens, keyboards, mice, and touch input. The system may also use audio output devices such as speakers or headphones to allow students to hear game sounds and learning feedback.

3.3 Software Interfaces

This section describes the interface between the system and external / internal software components , including databases , operating systems , libraries and third party services

Operating system environment:

Development: windows 10/11

Production: linus

Browsers : Chrome , Firefox , safari , brave

Software components:

Backend: [node.js](#) (v 23+) , [express.js](#) , mongoose , mongoDB , JWT authentication , bcrypt password hashing , security middleware (Helmet , CORS) rate limiting , and centralized error handling.

Frontend: react (v19+) , react router , axios for api communication , tailwind css for styling

Database: mongoDB (atlas cloud or local instance)

Database architecture :

Main collections include : users , children , games , learning modules , sessions , progress , achievements , alerts , and leaderboards

Relationship follow a one to many model

Communication and APIs

Front end and backend communicate via a restful APIs over https using json

Authentication using JWT bearer tokens

Core API modules include authentication , child management , games , learning progress , monitoring and safety

Data flow

Incoming data -> user authentication , child profiles , game results , learning progress session activity and safety events

Out going -> dashboards , analytics summaries , progress reports , alerts and authentication tokens

Security and constraints

Role based access control , encrypted password , secure headers , CORS restrictions, and api rate limiting

All protected routes require authentication

External integration:

mongoDB atlas for cloud database hosting

No third party external services; the system is self-contained

3.4 Communications Interfaces

The system functions as a web-based platform that can be accessed through standard web browsers on any supported devices that are used. All communication between the user's device and the system will take place over the internet using common communication protocols. These communications allow users to access the contents, submit interactions, and will be able to retrieve monitoring information. Communication features may include electronic forms, online help requests, calls or emails with support staff, and email-based contact for technical assistance or

parent-teacher communication. All transmitted data related to children's usage and online activity must be protected to ensure privacy, reliability, and overall system security.

4. System Features

4.1 Educator Monitoring Access

4.1.1 Description and Priority

This feature allows educators to monitor the children who are enrolled in their learning modules. It gives educators access to view information related to enrolled children in order for them to track their learning activities.

Priority: High

This feature is important because educators need to monitor the children they are responsible for.

4.1.2 Stimulus/Response Sequences

Stimulus no.1: The educator logs into the system.

Its response: The system displays the main dashboard of the educator.

Stimulus no. 2: The educator selects a learning module.

Its response: The system displays a list of children enrolled in that module.

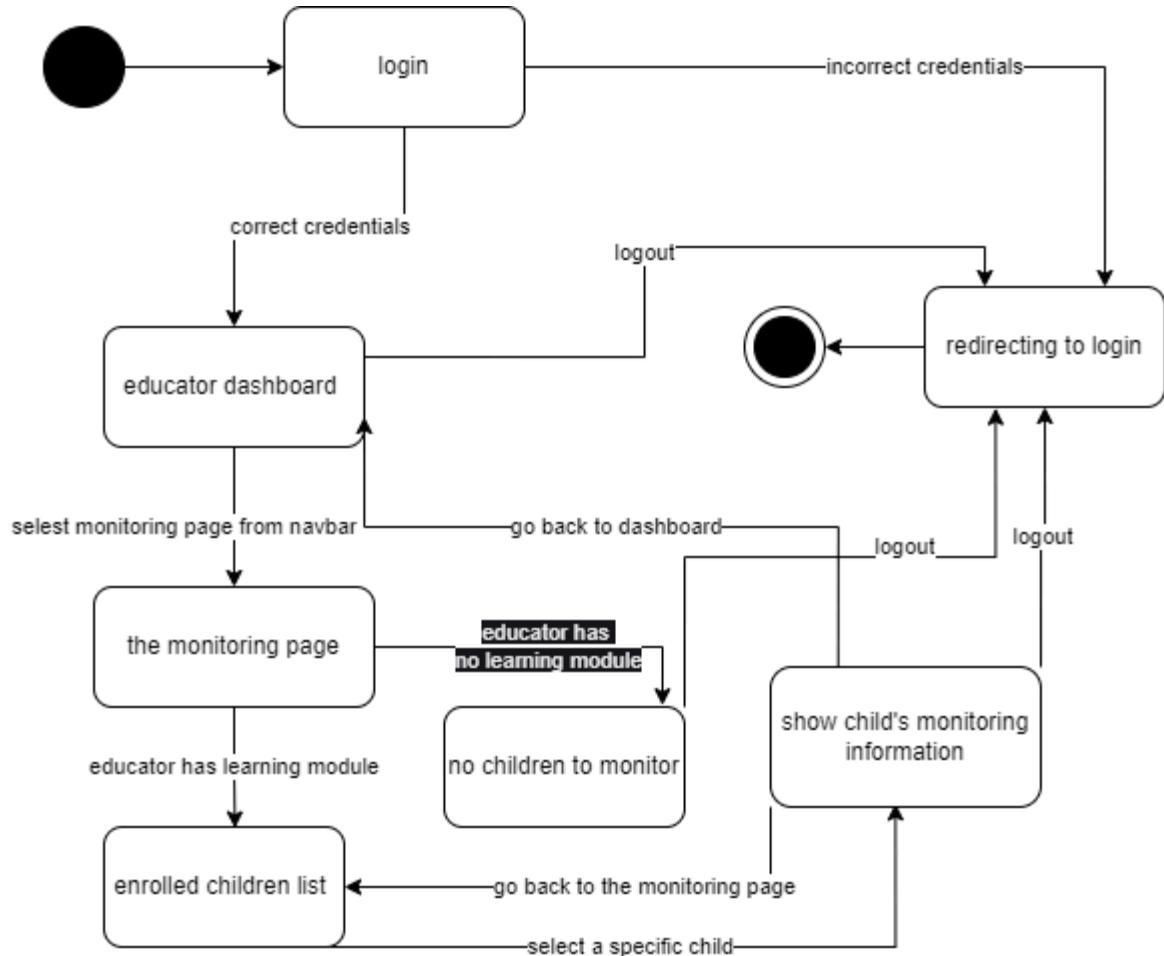
Stimulus no.3: The educator chooses a specific child.

Its response: The system shows monitoring information related to that child.

4.1.3 Functional Requirements

REQ-1: The system shall allow educators to view a list of children enrolled in their learning modules.

REQ-2: The system shall restrict educators to only monitor children enrolled in modules that they own.



4.2 Educator Access to child Dashboards

4.2.1 Description and Priority

This feature allows educators to access the dashboards of children enrolled in their learning modules. Educators can view progress and activity information for educational purposes through this access.

Priority: High

This feature is important as it helps educators to understand child performance and engagement.

4.2.2 Stimulus/Response Sequences

Stimulus no.1:The educator chooses a child from the enrolled list.

Its response: The system displays the dashboard of the chosen child in view-only mode.

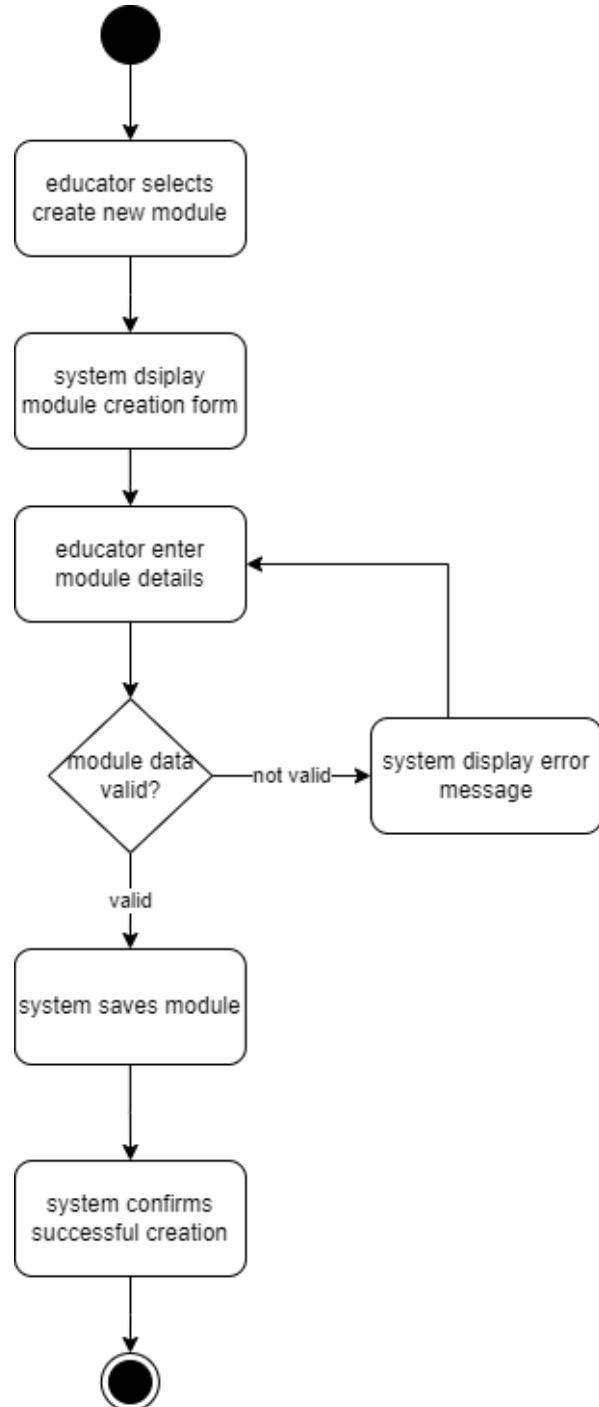
Stimulus no. 2: The educator navigates through dashboard sections.

Its response: The system displays the progress, activities, and earned rewards of that child.

4.2.3 Functional Requirements

REC-1: The system shall allow educators to access the dashboards of children that are enrolled in their learning modules.

REC-2: The system shall show the progress and activities of the child in a read-only format for educators.



4.3 Learning Module Creation

4.3.1 Description and Priority

This feature makes educators able to create new learning modules within the platform. A learning module includes information such as title, description, and related learning activities.

Priority: Medium

This feature is important to allow educators to add new learning content to the system.

4.3.2 Stimulus/Response Sequence

Stimulus no.1: The educator chooses the option to create a new module.

Its response: The system shows a form for module creation.

Stimulus no. 2: The educator enters the details of the module and then submits the form.

Its response: The system saves the module and confirms the success of the module creation.

Stimulus no.3: The educator submits incomplete or invalid data.

Its response: The system shows an error message that asks for correction.

4.3.3 Functional Requirements

REQ-1: The system shall make the educators be able to create new learning modules through entering required module information.

REQ-2: The system shall validate the module information and prevent saving incomplete or invalid modules.

REQ-3: The system shall confirm in case a learning module is created successfully.

4.4 Learning Module Editing

4.4.1 Description and Priority

This feature makes educators be able to edit learning modules that they created. Educators should be able to update the details of the module when changes or improvements are needed.

Priority: Medium

This feature is important as it makes the learning modules up to date and relevant.

4.4.2 Stimulus/Response sequences

Stimulus no.1: The educator chooses one of the existing modules.

Its response: The system shows the details of the module with options to edit.

Stimulus no. 2: The educator updates the information of the module and then saves the changes.

Its response: The system applies those changes and confirms the update.

4.4.3 Functional Requirements

REQ-1: The system shall make educators be able to edit learning modules that they have created.

REQ-2: The system shall prevent other educators from editing a learning module that belongs to a certain educator.

REQ-3: The system shall save and display the information of the updated module.

4.5 Age-Appropriate Games for children

4.5.1 Description and Priority

This feature makes children play games that suit their age group. Where the system displays games according to the age of children in order for the content not to be too difficult for them.

Priority: High

This feature is important in order for the children to have a safe and also an enjoyable experience that matches their age.

4.5.2 Stimulus/Response sequences

Stimulus no.1:The child logs into the system.

Its response: The system detects the age group of that child.

Stimulus no. 2: The child opens the games section.

Its response: The system displays only the games that match the age of the child.

4.5.3 Functional Requirements

REQ-1: The system shall show games based on the age group of the child.

REQ-2: The system shall prevent children from opening games that are outside their age group.

4.6 Age-Appropriate Lessons for Children

4.6.1 Description and Priority

This feature makes children be able to access lessons that are uploaded by educators and that are suitable for their age group. The lessons displayed to the child should suit his learning level.

Priority: High

This feature is important because it provides proper learning by avoiding lessons that are too advanced for the age group of the child.

4.6.2 Stimulus/Response sequences

Stimulus no.1:The child opens the lessons section.

Its response: The system displays lessons that suit the age group of the child.

Stimulus no. 2: The child chooses a certain lesson.

Its response: The system opens the lesson content for him.

4.6.3 Functional Requirements

REQ-1: The system shall show lessons uploaded by educators according to the age group of the child.

REQ-2: The system shall make children access only the lessons that match their age group.

4.7 Child Personal Dashboard

4.7.1 Description and Priority

This feature provides a personal dashboard for each child that displays his information and activity on the platform. This dashboard helps children in understanding what they have done so far and track their progress.

Priority: High

This feature is important as it makes children track their activities and progress.

4.7.2 Stimulus/Response sequences

Stimulus no.1:The child logs into the system.

Its response: The system opens the personal dashboard of the child.

Stimulus no. 2: The child views the dashboard.

Its response: The system displays the information and activity of the child.

4.7.3 Functional Requirements

REQ-1: The system shall provide a personal dashboard for each child.

REQ-2: The system shall show the activity and the progress of the child on the dashboard.

4.8 Leaderboard Viewing for Children

4.8.1 Description and Priority

This feature makes children able to see the leaderboard to compare their achievements so far with others. This is in order to motivate them to be more active.

Priority: Medium

This feature is important as it keeps children motivated but it is not that critical for basic system use.

4.8.2 Stimulus/Response sequences

Stimulus no.1:The child opens the leaderboard.

Its response: The system views the rankings in the leaderboard.

Stimulus no. 2: The child sees their position.

Its response: The system highlights the achievements of the child.

4.8.3 Functional Requirements

REQ-1: The system shall make children able to view the leaderboard.

REQ-2: The system shall display the achievements of the children on the leaderboard.

4.9 Parent Screen-Time Alert Management

4.9.1 Description and Priority

This feature makes parents able to receive alerts in case their child exceeds the allowed screen time on the platform. Receiving alerts helps parents manage and control the usage of their child through keeping the parents up to date about the excessive usage patterns.

Priority: High

This feature is important as it ensures the digital well-being of the children through their parents monitoring.

4.9.2 Stimulus/Response sequences

Stimulus no.1:The parent logs into the system.

Its response: The system shows the parent dashboard.

Stimulus no. 2: The sets or confirms the allowed screen time for their child.

Its response: The system saves the screen time limit and then starts monitoring the usage of the child.

Stimulus no.3: If the child exceeds the allowed screen time limit.

Its response: The system sends an alert to notify the parent that the limit has been exceeded.

Stimulus no.4: If the child is approaching the allowed screen time limit.

Its response: The system sends an alert to notify the parent that the child is approaching the daily screen time limit.

4.9.3 Functional Requirements

REQ-1: The system shall make parents able to set and view the allowed screen time limit for their child.

REQ-2: The system shall track the screen time usage of the child and detect when the allowed limit is exceeded.

REQ-3: The system shall notify the parent once the child exceeds the allowed screen time limit.

REQ-4: The system shall notify the parent when the child is approaching the allowed screen time limit.

4.10 Parent Child Progress and Usage Monitoring

4.10.1 Description and Priority

This feature makes parents able to track the usage patterns of their child and see his achievements on the leaderboard. It provides parents with information regarding how their child is interacting with the platform which helps them track his learning progress and level of motivation.

Priority: High

This feature is important as it allows parents to stay involved and know about their child's learning progress, and understand their activity behavior.

4.10.2 Stimulus/Response sequences

Stimulus no.1: The parent logs into the system.

Its response: The system shows the parent dashboard.

Stimulus no. 2: The parent chooses a certain child profile.

Its response: The system shows the usage and activity summary for that child.

Stimulus no.3: The parent opens the achievements or leaderboard section.

Its response: The system shows the achievements and leaderboard position of the child.

4.10.3 Functional Requirements

REQ-1: The system shall allow parents to see the usage patterns, including time spent on the platform and activity of their child.

REQ-2: The system shall allow parents to view the achievements and leaderboard position for their child.

REQ-3: The system shall make parents only access their child information.

4.11 Serious Curriculum Based Learning Games

4.11.1 Description and Priority

This feature allows children to play serious games that deliver curriculum based learning. These introduce curriculum topics such as chemistry and math.

Priority: High

This feature is important because the platform must deliver impactful learning through serious academic games.

4.11.2 Stimulus/Response sequences

Stimulus no.1:The child opens the learning section.

Its response: The system displays serious games that are curriculum based.

Stimulus no. 2: The child selects a serious game .

Its response: The system starts the selected serious learning game.

4.11.3 Functional Requirements

REQ-1: The system shall allow children to play serious games that deliver serious curriculum based learning .

REQ-2: The system shall include serious topics that introduce topics like chemistry, math and language.

REQ-3: The system shall allow children to access serious games suitable for their age groups.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

Because the platform is used by children and parents through a web interface the dashboard must display its main elements (welcome message, summary cards, achievements section and recent activity list) with responsive interaction. Exact timing values are TBD.

NFREQ-P1: The system shall support responsive and interactive use for children, parents and educators while using the platform's dashboards, games and monitoring modules. Specific response time targets are TBD.

NFREQ-P2: The system shall support multiple users accessing games and dashboard concurrently. Specific concurrent capacity is TBD.

NFREQ-P3: The system shall support smooth navigation between the top menu pages (Dashboard, Games, Learning, Monitoring); specific transition time targets are TBD.

NFREQ-P4: The system shall support responsive and interactive gameplay for children while playing games on the platform. Specific response time targets are TBD.

NFREQ-P5: The system shall load and start a selected game in short time after the child chooses it. Specific loading time targets are TBD.

NFREQ-P6: The system shall save a child's game progress and results in a timely manner after a game is completed. Specific timings are TBD.

5.2 Safety Requirements

NFREQ-SAF1: The system shall ensure that games provided to children are family friendly and appropriate to cultural contexts like those of Egypt.

NFREQ-SAF2: The system shall support identifying excessive gaming behaviour.

5.3 Security Requirements

NFREQ-SEC1: The system shall require user authentication for parents and educators before granting access to monitoring dashboards.

NFREQ-SEC2: The system shall restrict access to monitoring dashboards so that only authorized parents and educators can access children;s monitoring information.

NFREQ-SEC3: The system shall ensure that only educators responsible for specific children can access those children's monitoring information.

5.4 Software Quality Attributes

NFREQ-QUA1 Usability: The system shall provide a child friendly interface that is accessible to children, parents and educators.

NFREQ-QUA2 Age Appropriateness: The system shall provide age appropriate experiences for children in the groups (3-5), (6-8), and (9-12).

NFREQ-QUA3 Cultural Sensitivity: The system shall not reflect values or aesthetics that do not resonate with local contexts like Egypt.

NFREQ-QUA4 Reliability: The system shall reliably store and display monitoring information required for dashboards (like time spent and longest streak).

Business Rules

- Only registered parents can create and manage an account for only their children on the system
- Any data related to children users must only be accessed by authorized parents or educators
- Parents set screen time limits for the children and are enforced by the system and cannot be changed by a child
- Only children users are permitted to access the learning games and creative activities but are not allowed to create their own account
- All games provided to children must be family friendly.
- The platform shall provide experiences appropriate to the child's assigned age group (3-5, 6-8, 9-12)

6. Other Requirements

- The system shall support local language content for the target context (Egypt), including language used in games and educational content.
- The system shall store the data needed to visualise dashboards including time spent, longest streak and total points gained.

Appendix A: Glossary

PLP (Play, Learn and Protect)

The web based platform described in this SRS for children aged 3-12 in Egypt.

SRS (Software Requirements Specification)

The document that defines the functional and nonfunctional requirements for the PLP platform.

REQ

Prefix used for functional requirements in this SRS.

NFREQ

Prefix used for nonfunctional requirements in this SRS.

TBD(To Be Determined)

A placeholder meaning specific information is not finalized yet.

Monitoring Module:

Platform feature used by parents and educators to view children's usage patterns

Screen Time

Time spent by a child using the platform.

Appendix B: To Be Determined List

TBD-1: specific response time targets for “responsive and interactive use” across dashboards, games and monitoring modules (referenced in NFREQ-P1)

TBD-2: specific concurrent user capacity for multiple users accessing games and dashboards concurrently (referenced in NFREQ-P2)

TBD-3: specific transition time targets for navigation between top menu pages (referenced in NFREQ-P3)”

TBD-4: specific response time targets for responsive and interactive gameplay while children are playing on the platform

TBD-5: specific loading time targets for loading and starting a selected game after a child selects it

TBD-6: specific time targets for saving a child’s game progress and results after a game is completed.