

Terms of Reference

Digital Defender Game Development

Target users: Children aged 7-14, with supporting resources for parents and teachers

Game languages: Arabic and English

1. Background and purpose

7amleh seeks a qualified game development company or team to enhance the existing Digital Defender application game. The assignment covers game design, interactive learning, visual and audio production, software development, content management, testing, deployment and handover.

The development should help children practice digital safety through an engaging adventure. The game should respond visibly to their decisions, guide them when they need help and reward their progress. Its design must remain simple, intuitive and suitable for children with different ages, reading abilities and levels of digital experience.

2. Overall objective

Develop an enjoyable, accessible and age-appropriate game in which children feel they are taking part in a real adventure and learn through practical choices and interaction. Reduce reliance on direct text questions and avoid presenting the main experience as an educational test.

The updated game must strengthen engagement, make objectives and controls clearer, demonstrate the consequences of digital choices and allow 7amleh to maintain the content independently.

3. Assignment coverage

At inception, the provider shall review the existing game, source code, assets, content and deployment setup and confirm the implementation approach. Preserve useful existing work, including Pixel and the game identity, and justify any component that needs replacement.

All capabilities in Sections 4-8 form the requested scope. The proposal must state the number of topics, stages, mini games, boss challenges and content items included, with coverage for all three age bands and both languages. 7amleh will approve this inventory before contract signature. Any exclusions or separately priced options must be explicit.

4. Game design and interactive learning

4.1 Story and player guidance

Create a clear storyline that links all stages into one adventure, with a simple mission, connected challenges and a satisfying ending.

Add a stage map showing the player's current location, completed stages, unlocked stages and requirements for further progress.

Make the next action clear through visual cues such as highlighted objects, arrows, short demonstrations or contextual prompts. Include a brief interactive introduction and help that can be reopened.

Develop Pixel as an interactive guide who offers short tips and hints, reacts to the player's choices and encourages recovery after mistakes.

4.2 Practical challenges and visible consequences

Replace direct text questions with actions, exploration and decisions. Use short dialogue, images and icons to explain tasks and feedback.

Include Drag and Drop, Spot the Danger, Fake or Real, and Build Your Password activities. Use fictional practice information; never ask children to enter a real password.

Add short mini games between stages to vary the pace and reinforce digital safety skills. Keep instructions brief and make each activity easy to start and retry.

Make choices produce understandable, visible outcomes, such as an account becoming safer, a threat being blocked or a character receiving help. Explain the consequence beyond a Correct or Wrong label.

Include a boss challenge at the end of each group of stages, combining the skills practised in that group through a playable scenario.

Use situations familiar to children, including online games, messages, social media, suspicious links and fake accounts. Align each scenario with an approved learning objective and age band.

Allow another attempt after an incorrect choice. Offer a relevant hint before revealing the solution, then give a short explanation that supports learning.

4.3 Progress and rewards

Add experience points, or XP, for completing challenges. Make points earned and progress toward the next milestone visible, with clear and consistent rules.

Award badges and suitable rewards when a topic or stage is completed. Show earned badges in a collection or player progress view.

Introduce a Digital Shield or lives system that changes according to the player's decisions. Explain how protection is lost and restored, and allow children to recover without becoming permanently stuck.

Allow the player to create a custom character at the start using a manageable and inclusive set of age-appropriate preset options.

5. User experience and technical delivery

5.1 Mobile use and performance

Design for mobile use first, with large, clear buttons, readable text and touch-friendly interactions. Ensure layouts work across the agreed phone, tablet and desktop screen sizes.

Improve the loading screen with an animation or progress indicator. Provide a useful message and retry option when loading fails or connectivity is interrupted.

Optimize assets, downloads and runtime performance for medium- and lower-specification devices (The more inclusive the better). Avoid unnecessary downloads and prevent progress loss during ordinary interruptions.

State measurable performance targets in the proposal for loading time, asset size and interaction responsiveness, together with named reference devices and network conditions. Confirm the test matrix and targets with 7amleh during inception.

Identify the release coverage for web, Android and iOS, including browser support and any native application updates. Itemize platform-specific work and fees. 7amleh will confirm the release platforms before contracting; changes to existing platform coverage require its approval.

5.2 Languages and age adaptation

Provide complete Arabic and English versions of all game elements. Include translation, proofreading and language quality checks in the offer.

Implement correct right-to-left layouts in Arabic, including mixed text, numbers and navigation. Check both languages for clipping, missing text and layout errors.

Provide age-adapted difficulty for 7–9, 10–12 and 13–14. Adjust reading load, guidance, challenge complexity and pacing while maintaining consistent learning objectives. Use age-band selection rather than requiring a date of birth.

5.3 Animation audio and accessibility

Add animations and visual feedback for success, mistakes, newly unlocked stages and earned badges. Use purposeful effects that keep the next action clear.

Include sound effects and light background music, with separate volume or mute controls. Essential instructions and feedback must also be understandable without sound.

Provide high contrast, subtitles or captions for spoken content, and reduced-motion options. Do not communicate meaning through color alone; provide alternatives to precision dragging and keyboard access for web interactions.

Proposals with WCAG 2.2 compliance will be viewed favorably.

5.4 Saved progress and completion

Save progress so children can leave and return mid-level. Document the save method, recovery behavior and any device or browser limitations. Basic play should not require a personal account; price cross-device synchronization separately if proposed.

Show a Digital Safety Score at the end, with topic-level results, strengths and practical tips. Explain scoring in encouraging language; it is a learning indicator, not a guarantee of online safety.

Provide a completion certificate or Digital Defender badge that can be saved or downloaded without requiring a child's real name.

Add a parent and teacher section explaining the topics and skills covered, with short prompts or activities to support discussion and continued learning.

6. Content management and maintainability

Provide a practical content management interface that enables authorized 7amleh staff to maintain the game without major code changes (with an audit log). The agreed content inventory must be populated and tested before handover.

Allow staff to add, edit, organize and publish questions, scenarios, hints, translations, difficulty settings and stages using reusable stage and challenge templates.

Support the editing of learning objectives, scoring rules, rewards and parent and teacher resources, with validation to prevent incomplete or broken content from being published.

Include draft, preview and publish steps, appropriate staff access permissions, and a way to restore an earlier content version or backup.

Separate content from core game logic. Document supported templates and clearly identify changes, such as entirely new game mechanics, that would still require development.

Deliver structured content exports, an asset register and administrator guidance so that 7amleh can maintain or transfer the game to another provider.

7. Analytics and learning measurement

The game shall not collect or transmit personal data, persistent user identifiers, gameplay analytics, assessment results or behavioral telemetry. No third-party analytics or tracking SDKs shall be integrated into the game. 7amleh may rely on aggregate statistics made available independently by distribution platforms such as Google Play and the Apple App Store, and privacy-preserving aggregate traffic statistics for the web version. Web traffic

measurement must not use cookies, device fingerprinting or persistent identifiers to track individual users.

8. Child privacy and secure operation

If any data collection is necessary for running the game, consult with 7amleh before implementing the mechanism. The provider shall submit a data inventory showing all data collected, why it is needed, where it is stored, who can access it and when it is deleted. The provider shall also provide and maintain a data-flow diagram showing how data moves between the player's device, game client, and backend services (such as databases, analytics systems, administrative interfaces and third-party services). The diagram shall identify the types of data transmitted or stored at each stage and the relevant trust boundaries and external recipients.

Minimize personal information. Do not require a real name, email address, date of birth, exact location, contact list or social media login for basic play. Use fictional identities and examples within challenges.

Agree age-appropriate privacy information and any required parent or guardian consent process with 7amleh before collecting participant data.

Protect administrative access, use encrypted connections and appropriate storage protections, and provide backup, recovery and data deletion procedures. Disclose hosting locations, third-party services and recurring costs.

Maintain a registry of all third-party services, SDKs, libraries and external integrations used by the game. It should identify the provider and purpose of each component, the data it collects or receives, data transmitted from the user's device, permissions or device capabilities accessed, storage and processing locations, applicable retention periods, and whether the third party may process or use the data for its own purposes.

Exclude advertising, behavioral profiling, public child leaderboards and unnecessary external links. Report security issues found during development and resolve serious issues before release.

9. Deliverables and milestones

Deliverables must be submitted in editable formats where applicable. Each milestone requires written acceptance by 7amleh against the approved scope and test criteria.

Milestone	Required outputs
1 Inception and audit	Review of the existing code, content, assets and releases; implementation plan; agreed content inventory; platform and device matrix; performance targets; risk and dependency log.
2 Design and prototype	Game design document with storyline, map, mechanics, learning objectives, age adaptations, Pixel behavior, rewards and scoring; bilingual interface designs; a playable prototype showing a representative stage and feedback loop.
3 Integrated alphas	A playable build containing the agreed core mechanics, progression, content templates, saved progress, and administration. Demonstrate the full player journey and provide a feature completion register.
4 Tested bilingual betas	Complete Arabic and English content and assets; all age-band adaptations; accessibility controls; pre and post questions; results and completion reward; test report, pilot findings and fixes.
5 Production release	Accepted release deployed to the agreed environments and platforms; release notes; backup and rollback arrangements;

	monitoring setup; confirmed administrative access and operational checks.
6 Handover and support	Source repository, build and deployment instructions, editable assets, content exports, licenses and dependency register, administrator and user guides, staff training and the agreed post-launch defect support.

10. Schedule and coordination

Bidders must propose a realistic total duration and a week-by-week schedule covering all six milestones, review periods, user testing, revisions and deployment. Dates will be agreed in the contract. Identify dependencies on source access, content approval, participant recruitment, hosting and any application store review.

The provider shall appoint a project lead, maintain an accessible staging version and provide weekly progress updates and demonstrations at agreed checkpoints. Updates should identify completed work, upcoming work, issues and decisions needed from 7amleh.

7amleh will appoint a focal point, provide available source materials and access, approve educational content and designs, consolidate feedback and coordinate access to children, parents or teachers for testing. The provider remains responsible for implementation, quality assurance and correction of defects.

Any change to approved quantities, platform coverage, cost or delivery dates must be documented and agreed before the additional work starts. Routine corrections needed to meet accepted requirements are part of delivery.

11. Testing and acceptance

Agree a requirements checklist and test plan during inception. Test on the approved devices, browsers and release platforms, in both languages and all three age bands. Keep evidence of results and fixes.

Acceptance area	Evidence required for sign off
Gameplay and learning	An end-to-end playthrough demonstrates the story, map, all named challenge types, mini games, boss challenges, Pixel guidance, visible consequences, retries and hints. The approved topic and stage inventory is complete.
Progress and outcomes	XP, badges, shield or lives, avatar selection, topic scores and completion reward follow the approved rules. Closing and reopening the game restores progress under the documented save method.
Language and access	Complete Arabic and English flows; correct RTL; age-appropriate text and difficulty; working high contrast, captions, reduced motion and sound controls; usable alternatives to drag-only actions.
Performance and stability	Measured results meet the agreed load and responsiveness targets on named lower-specification devices. Tests cover slow connectivity, interrupted loading, repeat visits and error recovery.
Content administration	A 7amleh staff member can create a stage from an approved template, edit a question and hint, update both translations, preview, publish and restore content without changing source code.
Children and adult users	A pilot includes children from each target age band and parent or teacher feedback, using a 7amleh-approved participant plan and consent process. Report observed navigation, engagement and comprehension issues and the resulting fixes.

Release and handover	Production checks pass; 7amleh can access the repository and administration tools; delivery includes source assets, licenses, guides, training and a demonstrated build, backup and recovery process.
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Acceptance requires no unresolved defects deemed critical by 7amleh, no blocked core journey and no serious unresolved privacy or security issue. Define severity levels in the test plan. Any remaining minor issues require 7amleh's written acceptance and an agreed correction date.

Include at least 60 calendar days of defect correction support after final acceptance. The proposal must specify support channels, response and resolution times by severity, and separately priced maintenance beyond this period. Defects against the agreed requirements must be corrected without additional development charges.

12. Provider qualifications

Demonstrated experience delivering interactive games or gamified learning products, preferably for children, supported by relevant playable examples or portfolio links.

A team covering game design, development, child-friendly UX and UI, animation and audio, testing, and Arabic and English implementation, including RTL.

Experience with mobile performance, accessible interactions, content management, responsible handling of children's data.

13. Proposal requirements

Submit a technical proposal and a separate financial proposal containing the following:

Technical approach and creative concept, with a response to every scope area, proposed technology, reusable components, release platforms and any limitations.

Priced content inventory specifying topics, stages, mini games, boss challenges, question and scenario counts, age adaptations, translations and assets. Identify what is reused, revised or newly produced.

Workplan, milestone schedule, team roles and CVs, relevant portfolio examples, and a plan for child testing, accessibility, quality assurance and handover.

Itemized fixed-price budget by milestone and cost category, stating currency, taxes, licenses, hosting, store fees, third-party services and all recurring costs. Clearly separate optional services and ongoing maintenance.

Assumptions, dependencies, exclusions, offer validity, proposed payment milestones, warranty terms, and ownership or licensing restrictions affecting any component.

14. Evaluation

7amleh will assess compliance with the TOR, game and learning design, relevant experience, Arabic and mobile capability, accessibility, maintainability, testing, privacy, delivery feasibility and value for money. Any scoring weights and eligibility conditions will be stated in the procurement announcement.

15. Ownership payment and confidentiality

7amleh shall own all newly created project-specific code, designs, content, assets and documentation, with editable source files and credentials delivered at handover. Disclose pre-existing and third-party components, licenses and renewal costs, and ensure the licenses permit 7amleh to operate, modify and maintain the game.

Keep non-public project information and participant data confidential. Payment amounts and percentages will be agreed in the contract and linked to written acceptance of the relevant

deliverables. Publication or reuse of 7amleh's materials or participant data requires prior written permission.

16. Submission details

Application deadline: 20/10/2026

Submission email or portal: Mahdi@7amleh.org

Email subject: Proposal for Digital Defender Game Development