



# Game based system for English grammar practice

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## Intro

In almost all areas of learning, knowledge is acquired through extensive and repetitive practice of the learned material. A popular and appealing course of providing users with learning material is via digital devices, i.e. "e-learning".

## Problem

Most E-Learning systems do not yet have the impact that many believe is possible. Engaging learners long enough to see them through to the end of a course has become one of the most significant problems faced by e-learning developers

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## Solution

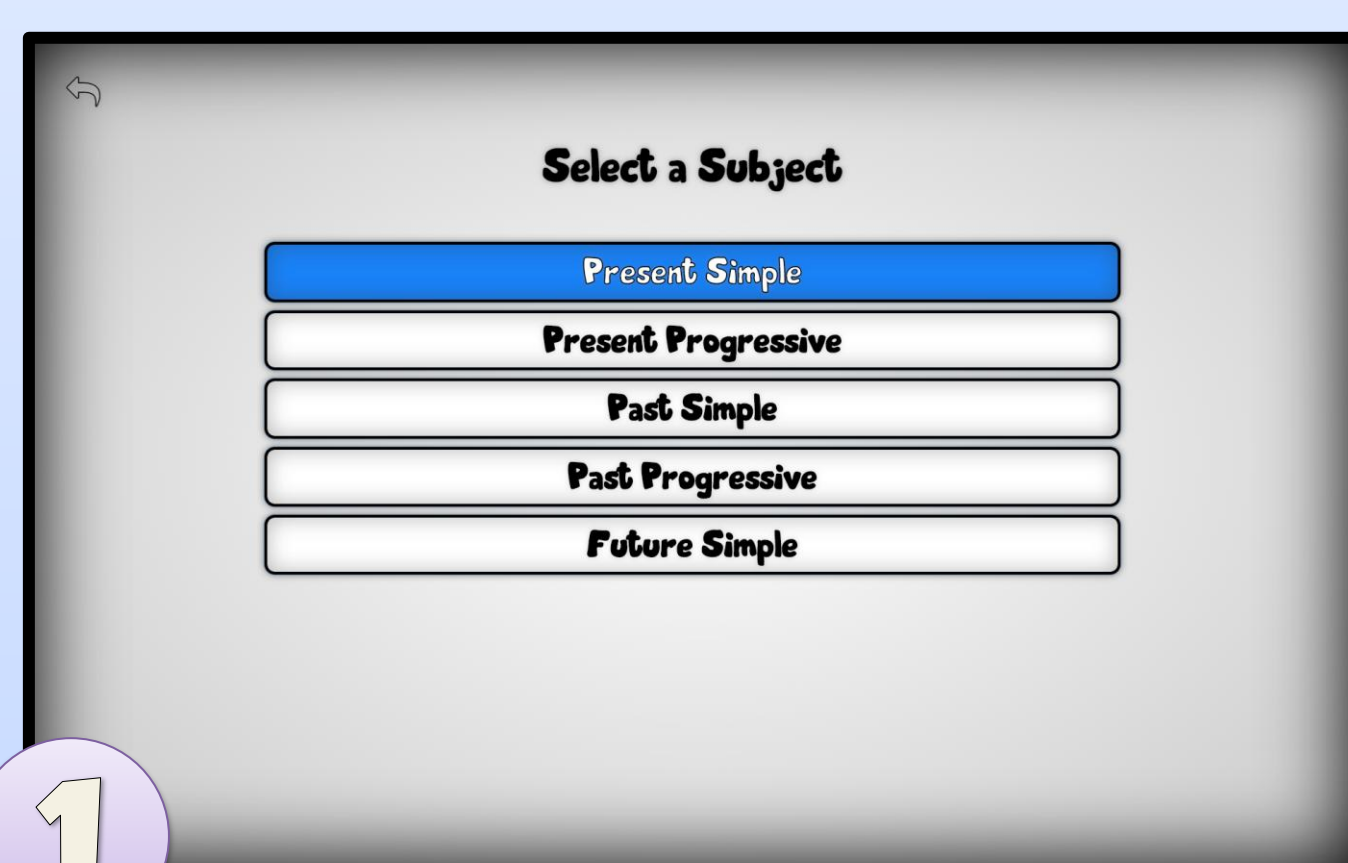
Engage learners through games. We all enjoy games, and when we enjoy ourselves, we learn better. Games are inherently motivating.

## Goal

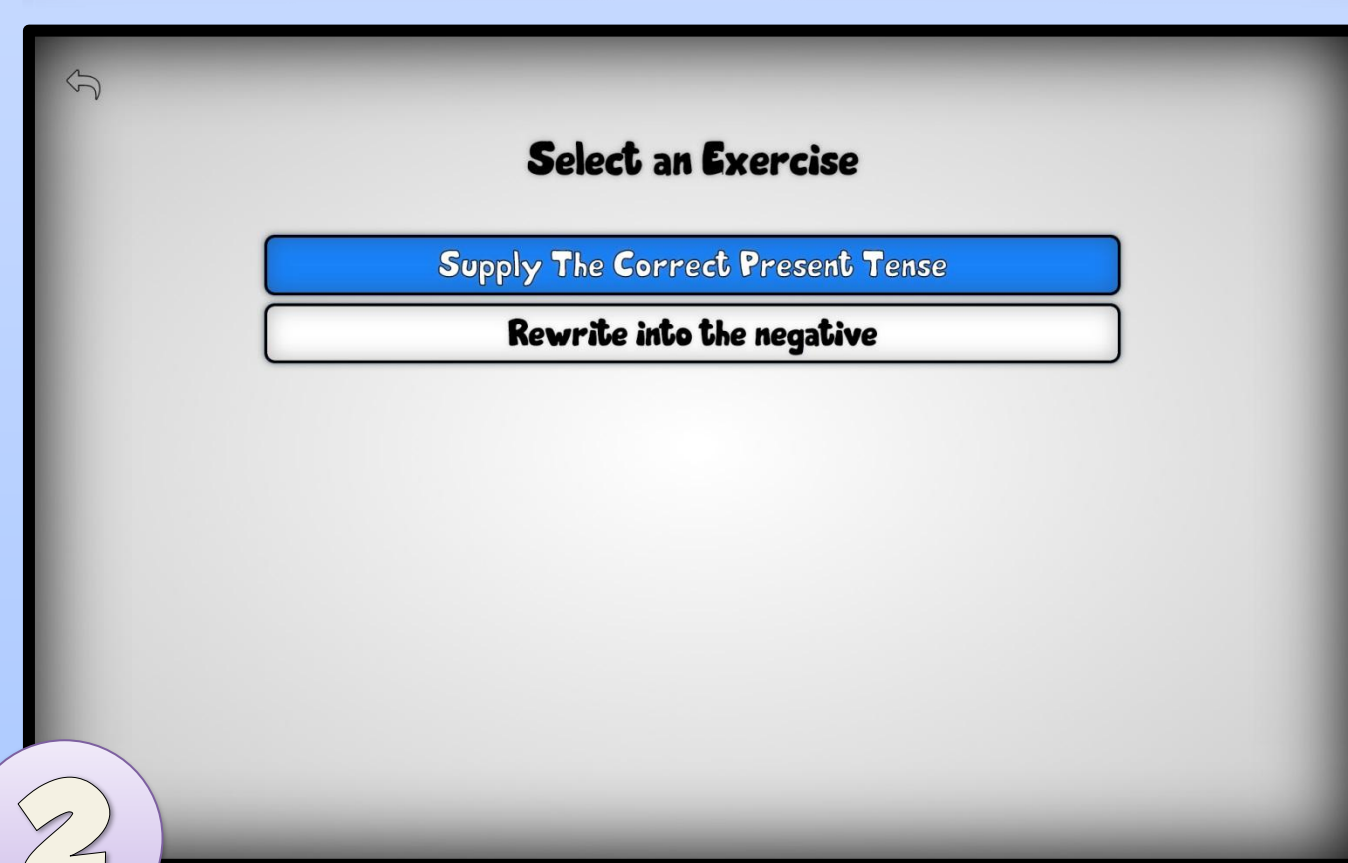
Enhance learner motivation through English grammar exercises using design principles from computer games.

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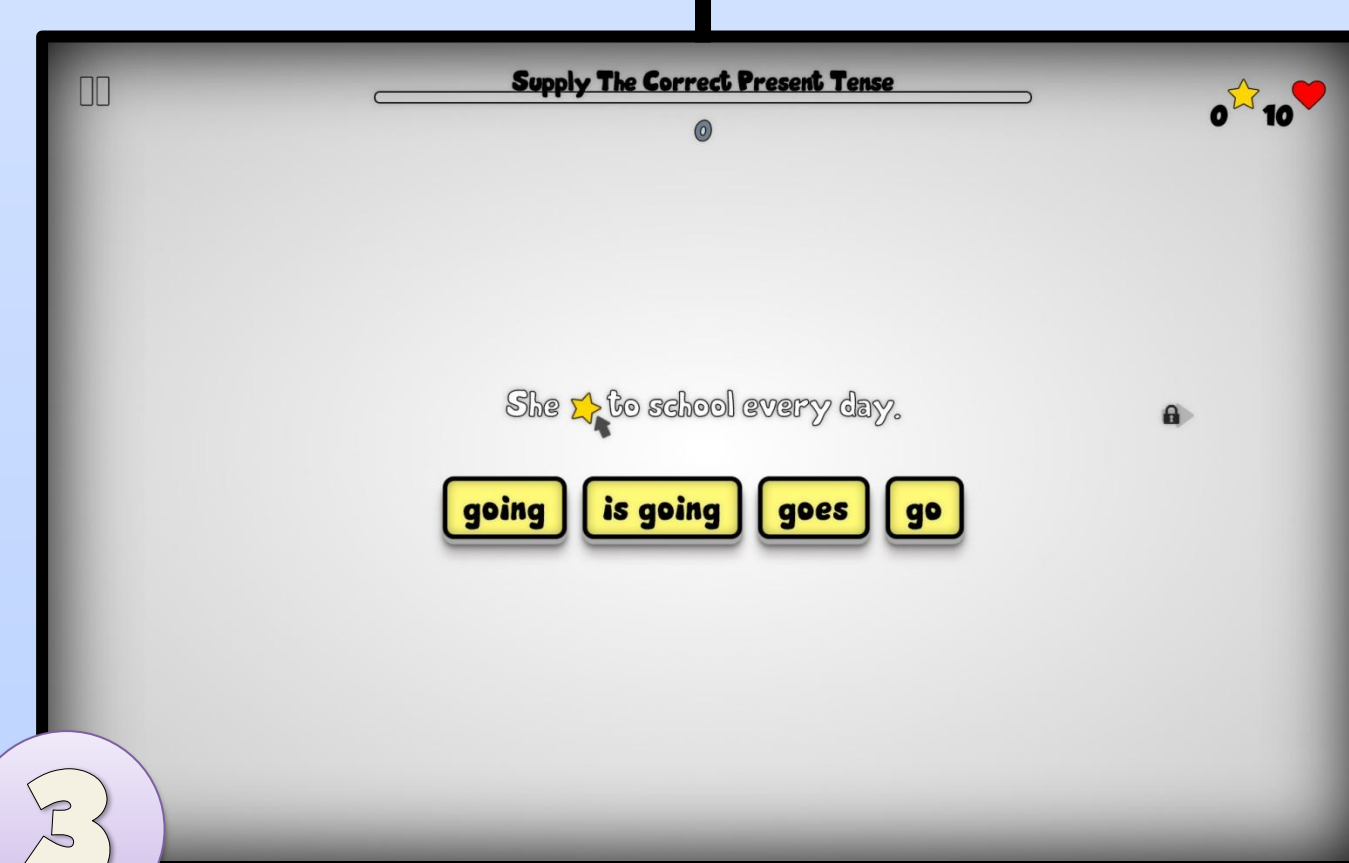
## The Game



Select a subject



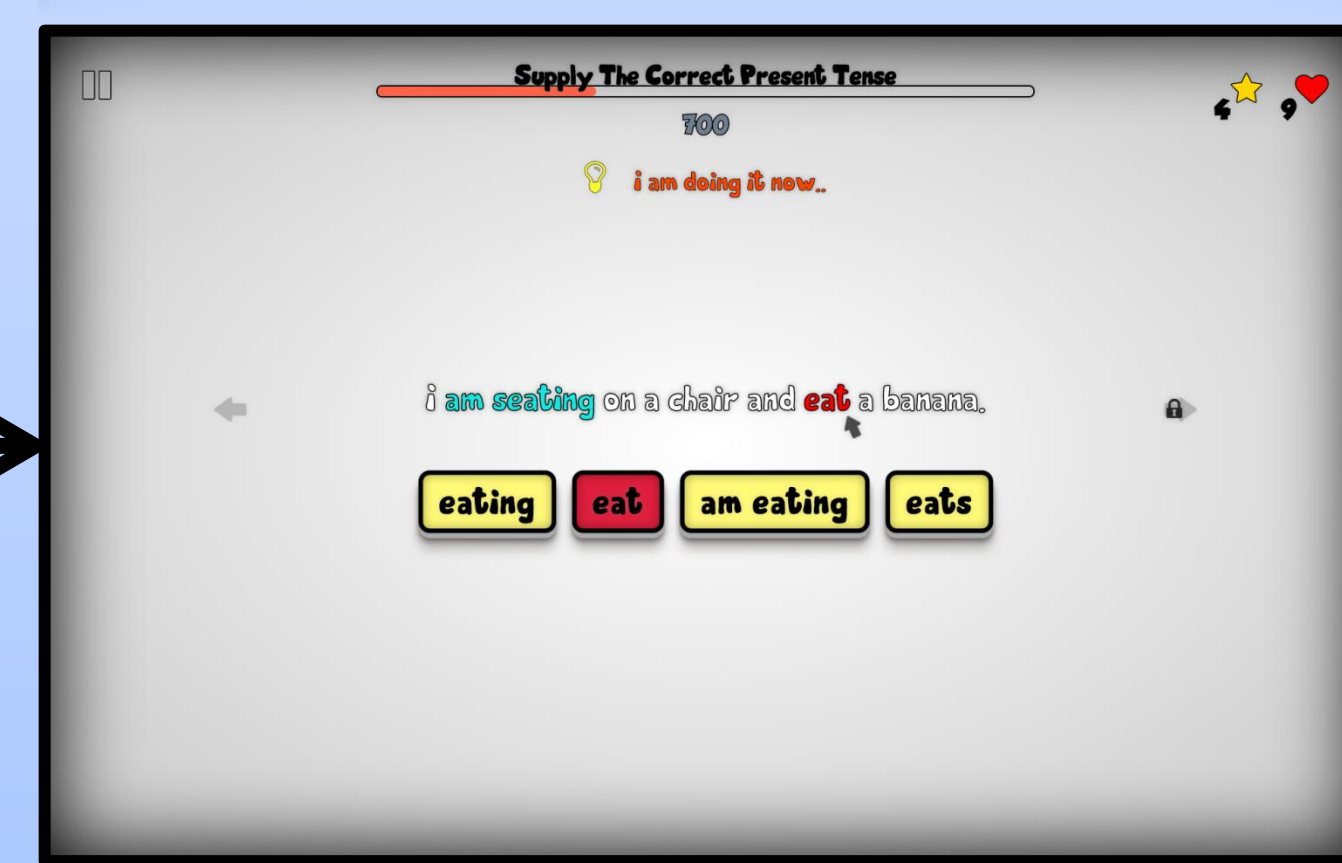
Select an exercise



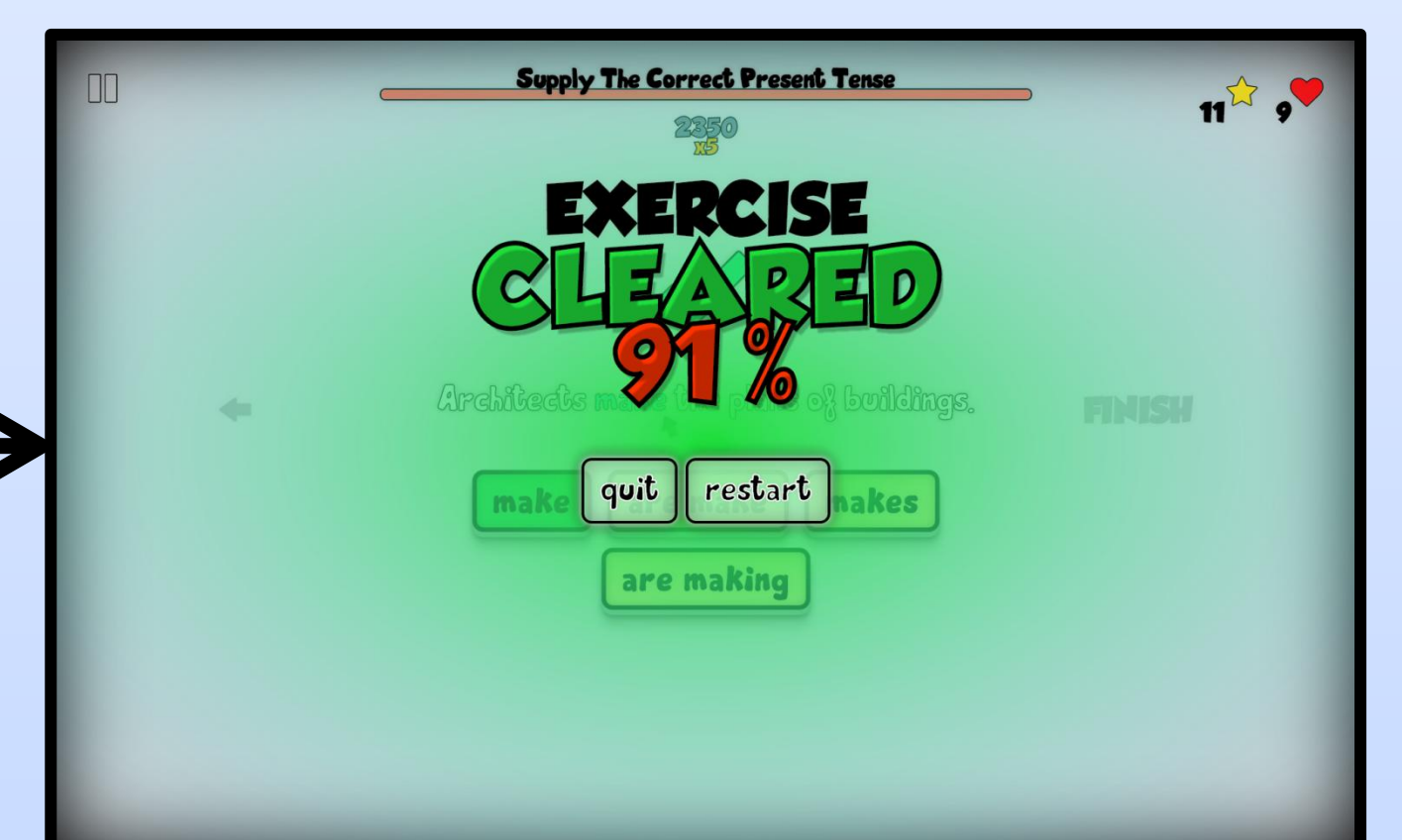
Play!



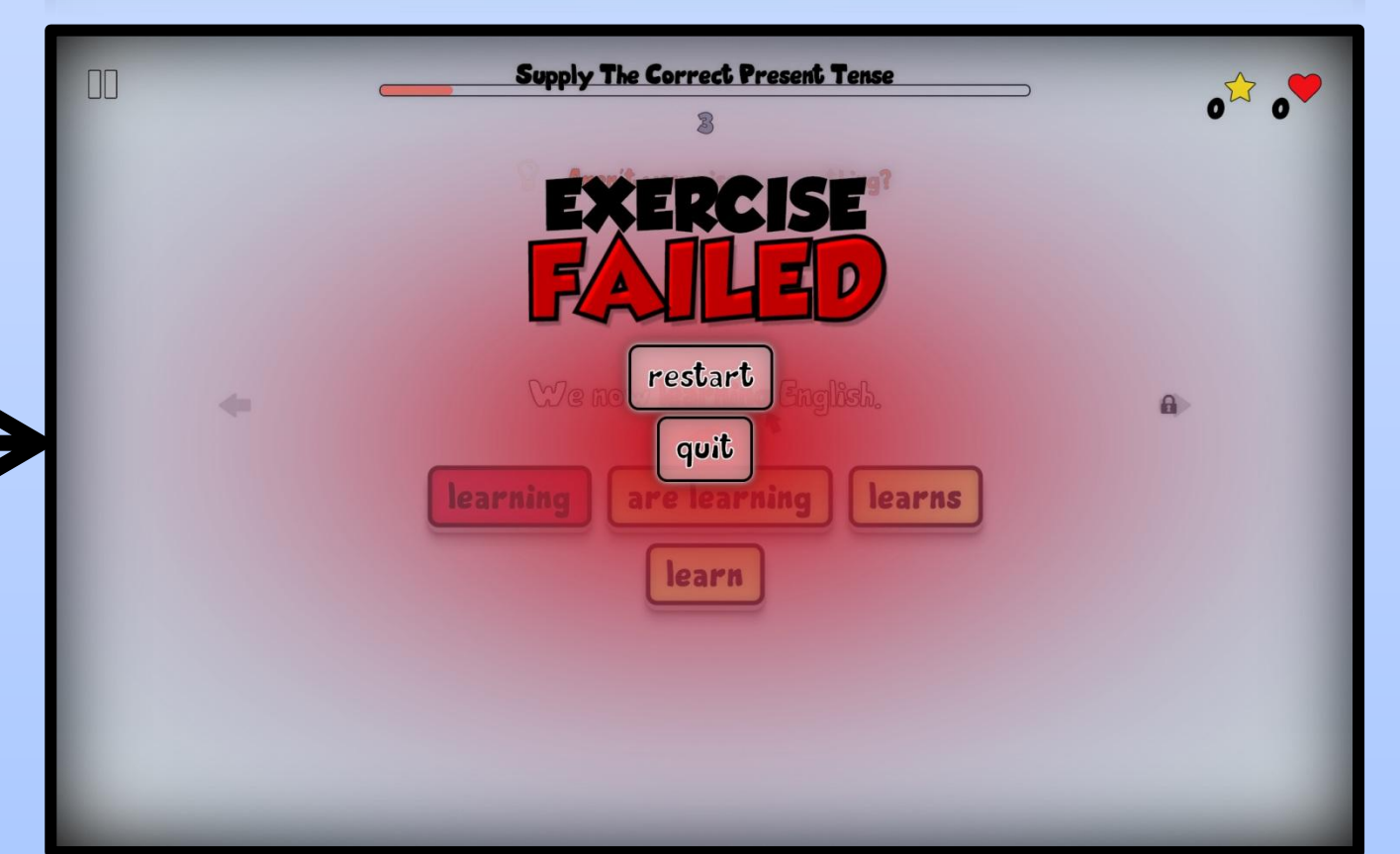
Collect stars and get points



Get feedbacks on mistakes



You win!



Careful not to fail...

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## Behind The Scenes



Response

Request



JSON

Response

Request



A MySQL database contains the data of subjects, exercises, questions, answers and feedbacks. A question may contain an unlimited number of blanks. Answers and their appropriate feedbacks are associated to each blank in a question.

Tomcat Servlet container runs the application's Java Servlets, exposing a RESTful interface(HATEOS constrained). Responses are transmitted in JSON format.

A rich single page app, implemented in pure JavaScript. HTML5 and CSS3 allow robust graphical content. Data is fetched pre-game – Immediate In-Game Response Times!