# Math Dog Game

## About this app:

Teachers have innovatively crafted specialized learning tips for young math enthusiasts, blending fun through mixed math games while tailoring the experience to each child's level of understanding.

### **Platforms:**

Android, iOS

### **Features**:

Generate questions, confirm the correctness of answers, and provide appropriate responses, including animations, sounds, etc., based on the answers.

### **More information:**

**Source code**: https://github.com/ytphi/CSUSB-CSE6550-math4kid-team2

Author: Liu, Yutong

### **Software used:**

Unity: The evolution of Unity, a licensed game engine utilized for creating video games and various applications, has transformed Unity Technologies into the prominent organization it is today.

#### Platforms:

Android, iOS

### **Features**:

3D and 2D graphics support

East to understand architecture

Unity scripting API

**Animation Tools** 

#### **More information:**

Source code: https://unity.com/download

Author: Kowser, Sultana

## **Visual Studio:**

A Microsoft IDE empowers developers to create apps for desktops, web, mobile, and more.

### **Platforms**:

Android, iOS.

### **Features:**

Develop

Debug

Test

Collaborate

Extend

### **More information:**

Source code: <a href="https://code.visualstudio.com/download">https://code.visualstudio.com/download</a>

Author: Kommuri, Aneela

## **Math Kids App Screens:**

### First Screen:

Home screen displays the game page, and by clicking on the play now button, it directs into the game



Author: Kowser, Sultana

### **Second screen:**

By clicking the menu button, the pop up displays the music option. We can play music while playing game or turn off the music.



Author: Kowser, Sultana

### **Third Screen:**

By clicking the correct option in the subtracting puzzle, the game moves forward and displays the next question

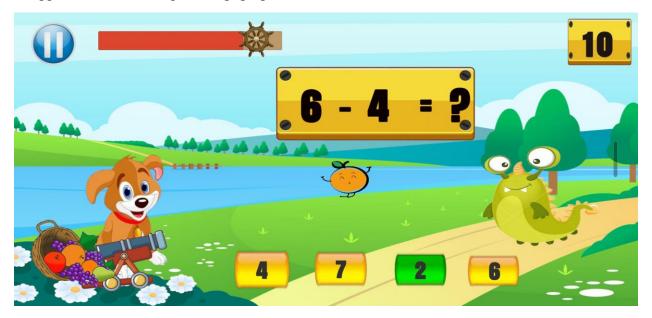
And, for every correct answer the credit points will be increased



Author: Jella Sharanya

### **Fourth Screen:**

For every correct answer, the dog throws the fruit on the monster. The fruit hits and the monster disappears and the new question pop ups.



Author: Jakkiredy Mohan Kumar Reddy

### Fifth screen:

The screen contains the pause button and the red wheel bar on the top left corner displays the timer for the question

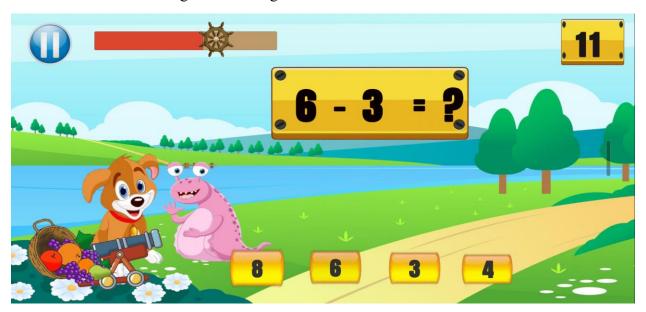
And the score on the top right corner displays the score for the question, for each correct answer the score will be increasing



Author: Jella, Sharanya

### **Sixth screen:**

When we did not give the correct answer or wrong answer the monster will move near the dog If the monster closes to dog and hits the game closes

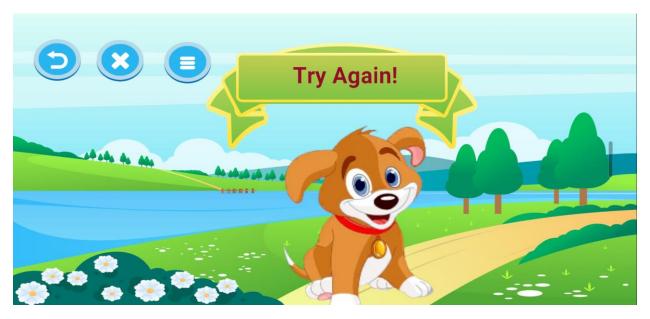


Author: Jakkireddy, Mohan Kumar Reddy

### **Seventh screen:**

After the monster hits the dog, the displays try again screen

In the top left corner, the three options show the return button, exit button and menu button

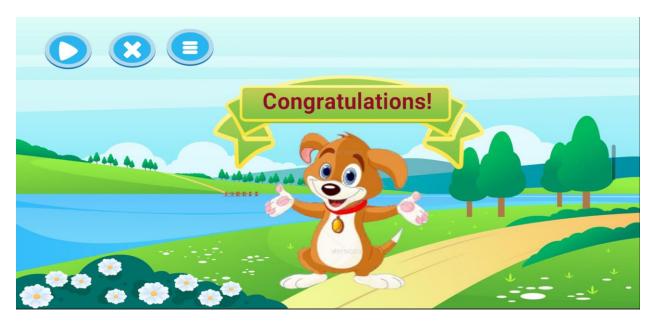


Author: Kowser, Sultana

## **Eighth Screen:**

If all the questions are correct, then the congratulations screen displays and game ends

Top left corner contains three buttons resume button, exit button and menu button



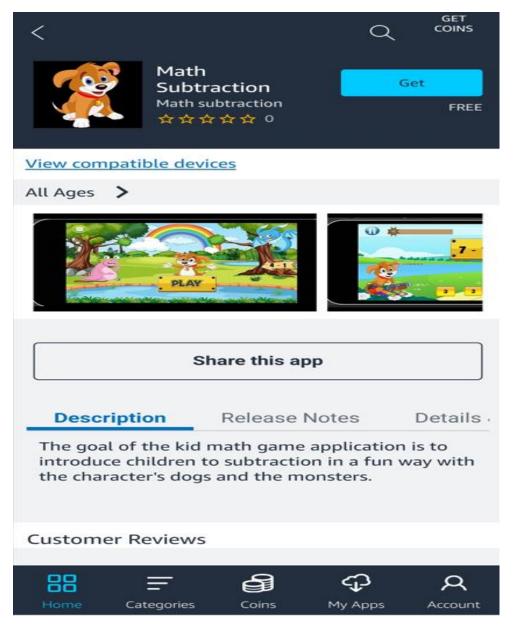
Author: Kowser, Sultana

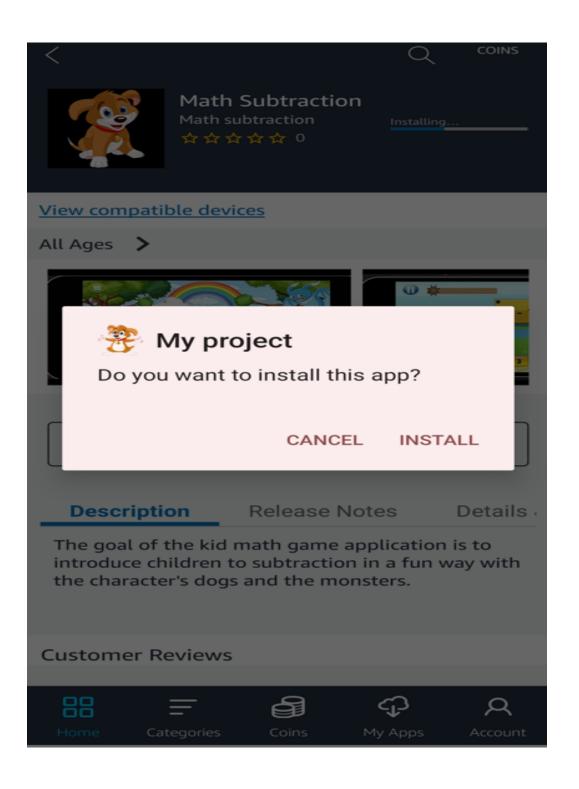
Platforms:
Android, iOS.
Features:
Screens
Questions
Options
Animations
Animated Transitions:
Transitions are animations used to keep users oriented during user interface (UI) state changes and object manipulations, and make those changes feel smooth instead of jarring
Platforms:
Android, iOS
Features:
Questions
Animations
More information:
Source code:
Author: Kowser, Sultana

## **Gaming Store:**

Commercial establishment specializing in selling video games, consoles, peripherals, and related merchandise for gaming enthusiasts.6y

Author: Liu, Yutong





### Share this app

Release Notes

**Details & permissions** 

#### Details

Rated: All Ages

Languages Supported: English

File Size: Size: 24.1MB ASIN: BOCLKVYZS9

Latest Developer Update: November 22, 2023 Original Release Date: November 22, 2023

Version: 2.0

Amazon's Return Policy

Sold by: Amazon.com Services LLC

#### Permissions

- Access information about networks
- Send information about completed downloads
- Open network sockets
- •Open windows using the type TYPE\_SYSTEM\_ALERT, shown on top of all other applications

### **Customer Reviews**

No customer reviews yet. Be the first to review this app.



## **Technical Requirements:**

Software engineering tools: Azure DevOps (Boards, Pipeline, Repos, Test Plans, Artifacts)

User interface (UI) programming language: Unity

Programming language: C#

App front-end technology: Unity

App back-end technology: Azure App Service

Integrated development environment (IDE): Visual Studio for Unity

Software engineering team: Agile team

Google AdMob in-app ads

**Nuget Packages** 

Cloud PaaS: Azure App Service

## **Game Algorithm:**

Start

Install the game in the Android/IOS

As the start of the game, a math kid game screen immediately appears

Home screen displays the game page with play button, which helps to enter the game.

After entering the game subtracting question will be displayed on the screen

For every correct answer the next question will be displayed on the screen

For each correct answer the dog throws an apple to the monster and the monster will be disappeared

If we didn't give any option, then the monster will come near the dog and the game will be ended

And it displays the 'Try Again' page, it contains replay button, home button and menu button

If we give all the answers correctly then the congratulations screen will appear and the game ends

End

### **Platforms:**

Android, iOS

#### **Features:**

A fun filled educational app for kids to learn

Allows kids to learn subtraction in mathematics

For every correct answer by kid, they earn the reward points

It helps to learn subtraction.

### **More information:**

**Source code:** https://github.com/ytphi/CSUSB-CSE6550-math4kid-team2

Author: Liu, Yutong

## **UML Diagrams:**

Graphic representation of system structure, behavior, and relationships using standardized symbols

### **Platforms**:

Android, iOS.

### **Features**:

Abstraction

Standardized Notation

Various diagram types

Analysis and design

### **More information:**

Source code: https://github.com/ytphi/CSUSB-CSE6550-math4kid-

team2/blob/main/Documents/UML%20sequence.jpg

Author: Jakkampudi, Sujana

### **SRS**:

Software Requirements Specification (SRS) is a detailed document defining software project requirements, functions, and constraints.

### **Platforms**:

Android, iOS.

### **Features**:

Game objectives and mechanics

Levels and progression

Math topics

Scoring and feedback

Sound and visuals

### **More information:**

Source code: file:///C:\Users\008440673\Downloads\SRS Team%202 %2030 10 23.docx

Author: Haridasula, Rohith