<퀴즈를 이용한 일본어 학습 >

소프트웨어 요구사항 사양

<하위 시스템 또는 기능>의 경우

Version <1.1>

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# 소개

일본어를 배우고 싶어하는 사용자에게 쉽게 접근하고 비교적 짧은 시간 안에 많은 걸 배울 수 있도록 히라가나와 가타카나 퀴즈를 통해 학습하며 일본어의 자음, 모음을 더 자세하게 학습할 수 있도록 여러가지 단어들을 제공합니다.

## 목적

*히라가나, 가타카나, 간단한 단어 확인 및 퀴즈*

## 범위

*히라가나, 가타카나 50음도, 간단한 단어*

## 정의

# 전체 설명

*이 어플은 일본어를 배우고 싶지만 시간이 없어 배우지 못하는 사람들을 위해 쉽게 접근하여 편하게 배울 수 있는 어플입니다. 핸드폰으로 손쉬운 학습이 가능하며 이 어플 하나로 다양한 단어를 암기할 수 있도록 설계되어 있습니다. 기본적으로 일본어에 필요한 히라가나, 가타카나를 제공하며 히라가나, 가타카나만 이용한 단어들을 제공합니다. 퀴즈 같은 경우 문제 정답을 고른 즉시 정답을 공개하며 퀴즈 마지막엔 틀린 횟수를 확인할 수 있어 퀴즈를 풀고서 자신의 일본어 능력이 얼마나 향상되었는지 확인할 수 있게 설계하였습니다*

## 사용 사례 모델 조사

설계하는 앱과 비슷한 “오십음”이라는 앱이 있습니다. 이 앱에선 현재 팀에서 설계하고 있는 퀴즈, 단어 외우기 등의 기능과 히라가나, 가타카나를 얼마나 습득하였는지 퍼센트로 확인할 수 있도록 되어 있습니다

## 가정과 종속성

*시작화면에서 히라가나와 가타카나를 각각 선택할 수 있으며, 히라가나를 선택하면 히라가나 퀴즈를 가타카나를 선택하면 가타카나 퀴즈를 풀도록 하며, 히라가나와 가타카나를 배우도록 합니다.*

## 업무분장

조장 – 김강훈

º 프로젝트 초안 작성

º 퀴즈페이지 수정(가타카나)

º

퀴즈페이지 레이아웃 수정: quiz2.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
 <Button  
 android:id="@+id/back"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="돌아가기" />  
  
 <TextView  
 android:id="@+id/question"  
 android:layout\_width="match\_parent"  
 android:layout\_height="246dp"  
 android:layout\_marginBottom="80dp"  
 android:gravity="center"  
 android:textSize="30sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 tools:layout\_editor\_absoluteY="-1dp" />  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:weightSum="2"  
 android:layout\_marginBottom="10dp">  
  
 <android.widget.Button  
 android:id="@+id/answer1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="16dp"  
 tools:layout\_editor\_absoluteY="358dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginLeft="5dp"  
 android:layout\_marginRight="10dp"/>  
  
 <android.widget.Button  
 android:id="@+id/answer2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="208dp"  
 tools:layout\_editor\_absoluteY="540dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginRight="5dp"/>  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <android.widget.Button  
 android:id="@+id/answer3"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="16dp"  
 tools:layout\_editor\_absoluteY="358dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginLeft="5dp"  
 android:layout\_marginRight="10dp"/>  
  
 <android.widget.Button  
 android:id="@+id/answer4"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="208dp"  
 tools:layout\_editor\_absoluteY="540dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginRight="5dp"/>  
 </LinearLayout>  
</LinearLayout>

퀴즈페이지 퀴즈 기능 수정 및 완성 - Quiz2.java

package kr.ac.yuhan.cs.andriodproject\_cute\_jo;  
  
import android.content.Intent;  
import android.graphics.Color;  
import android.os.Bundle;  
import android.os.Handler;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
import android.widget.Toast;  
import androidx.appcompat.app.AppCompatActivity;  
  
import java.util.ArrayList;  
import java.util.Arrays;  
import java.util.Collections;  
import java.util.List;  
import java.util.Random;  
  
public class Quiz2 extends AppCompatActivity {  
  
 private TextView question;  
 private Button answer1Button, answer2Button, answer3Button, answer4Button;  
 private String[] questions;  
 private String[] answers;  
 private Random random;  
  
 private int currentQuestionIndex = 0;  
 private int correctAnswerIndex = 0;  
 private int correctCount = 0; // 맞힌 문제 수  
 private int currentQuizCount = 0; // 현재 진행 중인 퀴즈 횟수  
 private static final int *TOTAL\_QUIZZES* = 10; // 퀴즈 횟수  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*quiz1*);  
// 돌아가기 버튼 클릭 시  
 Button back = (Button) findViewById(R.id.*back*);  
 back.setOnClickListener(new View.OnClickListener(){  
  
 @Override  
 public void onClick(View view){  
 Intent intent = new Intent(getApplicationContext(), MainActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 question = findViewById(R.id.*question*);  
 answer1Button = findViewById(R.id.*answer1*);  
 answer2Button = findViewById(R.id.*answer2*);  
 answer3Button = findViewById(R.id.*answer3*);  
 answer4Button = findViewById(R.id.*answer4*);  
  
 random = new Random();  
 questions = new String[]{"ア", "イ", "ウ", "エ", "オ",  
 "カ", "キ", "ク", "ケ", "コ", "サ", "シ", "ス", "セ", "ソ",  
 "タ", "チ", "ツ", "テ", "ト", "ナ", "ニ", "ヌ", "ネ", "ノ",  
 "ハ", "ヒ", "フ", "ヘ", "ホ", "マ", "ミ", "ム", "メ", "モ",  
 "ヤ", "ユ", "ヨ", "ラ", "リ", "ル", "レ", "ロ", "ワ", "ヲ", "ン"};  
  
 answers = new String[]{"a", "i", "u", "e", "o",  
 "ka", "ki", "ku", "ke", "ko", "sa", "shi", "su", "se", "so",  
 "ta", "chi", "tsu", "te", "to", "na", "ni", "nu", "ne", "no",  
 "ha", "hi", "fu", "he", "ho", "ma", "mi", "mu", "me", "mo",  
 "ya", "yu", "yo", "ra", "ri", "ru", "re", "ro", "wa", "wo", "n"};  
 loadQuestion();  
  
 View.OnClickListener answerButtonClickListener = new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 checkAnswer(v);  
 }  
 };  
  
 answer1Button.setOnClickListener(answerButtonClickListener);  
 answer2Button.setOnClickListener(answerButtonClickListener);  
 answer3Button.setOnClickListener(answerButtonClickListener);  
 answer4Button.setOnClickListener(answerButtonClickListener);  
 }  
  
 private void loadQuestion() {  
 currentQuizCount++;  
 if (currentQuizCount > *TOTAL\_QUIZZES*) {  
 endQuiz();  
 return;  
 }  
  
 currentQuestionIndex = random.nextInt(questions.length);  
 question.setText(questions[currentQuestionIndex]);  
  
 List<String> options = new ArrayList<>();  
 options.add(answers[currentQuestionIndex]);  
 while (options.size() < 4) {  
 int wrongAnswerIndex = random.nextInt(answers.length);  
 if (wrongAnswerIndex != currentQuestionIndex && !options.contains(answers[wrongAnswerIndex])) {  
 options.add(answers[wrongAnswerIndex]);  
 }  
 }  
 Collections*.shuffle*(options);  
  
 answer1Button.setText(options.get(0));  
 answer2Button.setText(options.get(1));  
 answer3Button.setText(options.get(2));  
 answer4Button.setText(options.get(3));  
  
 correctAnswerIndex = options.indexOf(answers[currentQuestionIndex]);  
  
 resetButtonColors();  
 }  
  
 private void resetButtonColors() {  
 answer1Button.setBackgroundColor(Color.*WHITE*);  
 answer2Button.setBackgroundColor(Color.*WHITE*);  
 answer3Button.setBackgroundColor(Color.*WHITE*);  
 answer4Button.setBackgroundColor(Color.*WHITE*);  
 }  
  
 private void checkAnswer(View v) {  
 int selectedAnswerIndex = -1;  
 if (v.getId() == R.id.*answer1*) {  
 selectedAnswerIndex = 0;  
 } else if (v.getId() == R.id.*answer2*) {  
 selectedAnswerIndex = 1;  
 } else if (v.getId() == R.id.*answer3*) {  
 selectedAnswerIndex = 2;  
 } else if (v.getId() == R.id.*answer4*) {  
 selectedAnswerIndex = 3;  
 }  
  
 if (selectedAnswerIndex == correctAnswerIndex) {  
 v.setBackgroundColor(Color.*GREEN*);  
 correctCount++;  
 Toast*.makeText*(this, "Correct!", Toast.*LENGTH\_SHORT*).show();  
 } else {  
 v.setBackgroundColor(Color.*RED*);  
 Toast*.makeText*(this, "Incorrect!", Toast.*LENGTH\_SHORT*).show();  
 if (correctAnswerIndex == 0) answer1Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 1) answer2Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 2) answer3Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 3) answer4Button.setBackgroundColor(Color.*GREEN*);  
 }  
  
 new Handler().postDelayed(new Runnable() {  
 @Override  
 public void run() {  
 loadQuestion();  
 }  
 }, 1000);  
 }  
  
 private void endQuiz() {  
 Toast*.makeText*(this, "Quiz Finished! You got " + correctCount + " out of " + *TOTAL\_QUIZZES* + " correct.", Toast.*LENGTH\_LONG*).show();  
 disableButtons();  
  
 new Handler().postDelayed(new Runnable() {  
 @Override  
 public void run() {  
 Intent intent = new Intent(Quiz2.this, MainActivity.class);  
 startActivity(intent);  
 finish();  
 }  
 }, 3000); // 3초 후 메인 화면으로 이동  
 }  
  
 private void disableButtons() {  
 answer1Button.setEnabled(false);  
 answer2Button.setEnabled(false);  
 answer3Button.setEnabled(false);  
 answer4Button.setEnabled(false);  
 }  
}

팀원 – 김선호

º 프로젝트 초안 작성

º퀴즈페이지 수정 (히라가나)

º퀴즈 후 결과 페이지 작성 및 퀴즈 페이지 수정

Quiz1.java

package kr.ac.yuhan.cs.andriodproject\_cute\_jo;  
  
import android.content.Intent;  
import android.content.SharedPreferences;  
import android.graphics.Color;  
import android.os.Bundle;  
import android.os.Handler;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
import android.widget.Toast;  
import androidx.appcompat.app.AppCompatActivity;  
  
import java.util.ArrayList;  
import java.util.Arrays;  
import java.util.Collections;  
import java.util.List;  
import java.util.Random;  
  
public class Quiz1 extends AppCompatActivity {  
  
 private TextView question;  
 private Button answer1Button, answer2Button, answer3Button, answer4Button;  
 private String[] questions;  
 private String[] answers;  
 private Random random;  
  
 private int currentQuestionIndex = 0;  
 private int correctAnswerIndex = 0;  
 private int correctCount = 0; // 맞힌 문제 수  
 private int currentQuizCount = 0; // 현재 진행 중인 퀴즈 횟수  
 private static final int *TOTAL\_QUIZZES* = 10; // 퀴즈 횟수  
  
 // 퀴즈 질문과 답변을 저장할 리스트  
 private List<String> quizQuestions;  
 private List<String> userAnswers;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*quiz1*);  
// 돌아가기 버튼 클릭 시  
 Button back = (Button) findViewById(R.id.*back*);  
 back.setOnClickListener(new View.OnClickListener(){  
  
 @Override  
 public void onClick(View view){  
 Intent intent = new Intent(getApplicationContext(), MainActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 question = findViewById(R.id.*question*);  
 answer1Button = findViewById(R.id.*answer1*);  
 answer2Button = findViewById(R.id.*answer2*);  
 answer3Button = findViewById(R.id.*answer3*);  
 answer4Button = findViewById(R.id.*answer4*);  
  
 random = new Random();  
 questions = new String[]{"あ", "い", "う", "え", "お",  
 "か", "き", "く", "け", "こ", "さ", "し", "す", "せ", "そ",  
 "た", "ち", "つ", "て", "と", "な", "に", "ぬ", "ね", "の",  
 "は", "ひ", "ふ", "へ", "ほ", "ま", "み", "む", "め", "も",  
 "や", "ゆ", "よ", "ら", "り", "る", "れ", "ろ", "わ", "を", "ん"};  
  
 answers = new String[]{"a", "i", "u", "e", "o",  
 "ka", "ki", "ku", "ke", "ko", "sa", "shi", "su", "se", "so",  
 "ta", "chi", "tsu", "te", "to", "na", "ni", "nu", "ne", "no",  
 "ha", "hi", "fu", "he", "ho", "ma", "mi", "mu", "me", "mo",  
 "ya", "yu", "yo", "ra", "ri", "ru", "re", "ro", "wa", "wo", "n"};  
 // 리스트 초기화  
 quizQuestions = new ArrayList<>();  
 userAnswers = new ArrayList<>();  
 loadQuestion();  
  
 View.OnClickListener answerButtonClickListener = new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 checkAnswer(v);  
 }  
 };  
  
 answer1Button.setOnClickListener(answerButtonClickListener);  
 answer2Button.setOnClickListener(answerButtonClickListener);  
 answer3Button.setOnClickListener(answerButtonClickListener);  
 answer4Button.setOnClickListener(answerButtonClickListener);  
 }  
  
 private void loadQuestion() {  
 currentQuizCount++;  
 if (currentQuizCount > *TOTAL\_QUIZZES*) {  
 endQuiz();  
 return;  
 }  
  
 currentQuestionIndex = random.nextInt(questions.length);  
 question.setText(questions[currentQuestionIndex]);  
  
 List<String> options = new ArrayList<>();  
 options.add(answers[currentQuestionIndex]);  
 while (options.size() < 4) {  
 int wrongAnswerIndex = random.nextInt(answers.length);  
 if (wrongAnswerIndex != currentQuestionIndex && !options.contains(answers[wrongAnswerIndex])) {  
 options.add(answers[wrongAnswerIndex]);  
 }  
 }  
 Collections.*shuffle*(options);  
  
 answer1Button.setText(options.get(0));  
 answer2Button.setText(options.get(1));  
 answer3Button.setText(options.get(2));  
 answer4Button.setText(options.get(3));  
  
 correctAnswerIndex = options.indexOf(answers[currentQuestionIndex]);  
  
 resetButtonColors();  
 }  
  
 private void resetButtonColors() {  
 answer1Button.setBackgroundColor(Color.*WHITE*);  
 answer2Button.setBackgroundColor(Color.*WHITE*);  
 answer3Button.setBackgroundColor(Color.*WHITE*);  
 answer4Button.setBackgroundColor(Color.*WHITE*);  
 }  
  
 private void checkAnswer(View v) {  
 int selectedAnswerIndex = -1;  
 if (v.getId() == R.id.*answer1*) {  
 selectedAnswerIndex = 0;  
 } else if (v.getId() == R.id.*answer2*) {  
 selectedAnswerIndex = 1;  
 } else if (v.getId() == R.id.*answer3*) {  
 selectedAnswerIndex = 2;  
 } else if (v.getId() == R.id.*answer4*) {  
 selectedAnswerIndex = 3;  
 }  
  
 // 사용자 답변 저장  
 String userAnswer = "";  
 switch (selectedAnswerIndex) {  
 case 0: userAnswer = answer1Button.getText().toString(); break;  
 case 1: userAnswer = answer2Button.getText().toString(); break;  
 case 2: userAnswer = answer3Button.getText().toString(); break;  
 case 3: userAnswer = answer4Button.getText().toString(); break;  
 }  
 quizQuestions.add(questions[currentQuestionIndex] + " -> " + answers[currentQuestionIndex]);  
 userAnswers.add(userAnswer);  
  
 if (selectedAnswerIndex == correctAnswerIndex) {  
 v.setBackgroundColor(Color.*GREEN*);  
 correctCount++;  
 Toast.*makeText*(this, "Correct!", Toast.*LENGTH\_SHORT*).show();  
 } else {  
 v.setBackgroundColor(Color.*RED*);  
 Toast.*makeText*(this, "Incorrect!", Toast.*LENGTH\_SHORT*).show();  
 if (correctAnswerIndex == 0) answer1Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 1) answer2Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 2) answer3Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 3) answer4Button.setBackgroundColor(Color.*GREEN*);  
 }  
  
 new Handler().postDelayed(new Runnable() {  
 @Override  
 public void run() {  
 loadQuestion();  
 }  
 }, 1000);  
 }  
  
 private void endQuiz() {  
 // 퀴즈 결과 저장  
 Intent intent = new Intent(Quiz1.this, Quiz1Result.class);  
 intent.putExtra("correctCount", correctCount);  
 intent.putExtra("totalQuizzes", *TOTAL\_QUIZZES*);  
 intent.putStringArrayListExtra("quizQuestions", (ArrayList<String>) quizQuestions);  
 intent.putStringArrayListExtra("userAnswers", (ArrayList<String>) userAnswers);  
 startActivity(intent);  
 finish();  
 }  
  
 private void disableButtons() {  
 answer1Button.setEnabled(false);  
 answer2Button.setEnabled(false);  
 answer3Button.setEnabled(false);  
 answer4Button.setEnabled(false);  
 }  
}

Quiz1Result.java

package kr.ac.yuhan.cs.andriodproject\_cute\_jo;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.LinearLayout;  
import android.widget.TextView;  
import androidx.appcompat.app.AppCompatActivity;  
  
import java.util.List;  
  
public class Quiz1Result extends AppCompatActivity {  
  
 private TextView resultTextView;  
 private Button mainMenuButton;  
 private LinearLayout quizDetailsLayout;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*quiz1\_result*);  
  
 resultTextView = findViewById(R.id.*result\_text\_view*);  
 mainMenuButton = findViewById(R.id.*main\_menu\_button*);  
 quizDetailsLayout = findViewById(R.id.*quiz\_details\_layout*);  
  
 // 퀴즈 결과 가져오기  
 Intent intent = getIntent();  
 int correctCount = intent.getIntExtra("correctCount", 0);  
 int totalQuizzes = intent.getIntExtra("totalQuizzes", 10);  
 List<String> quizQuestions = intent.getStringArrayListExtra("quizQuestions");  
 List<String> userAnswers = intent.getStringArrayListExtra("userAnswers");  
  
 // 결과 표시  
 resultTextView.setText("You got " + correctCount + " out of " + totalQuizzes + " correct.");  
  
 for (int i = 0; i < quizQuestions.size(); i++) {  
 String question = quizQuestions.get(i);  
 String userAnswer = userAnswers.get(i);  
  
 TextView questionTextView = new TextView(this);  
 questionTextView.setText((i + 1) + ". " + question);  
 quizDetailsLayout.addView(questionTextView);  
  
 TextView userAnswerTextView = new TextView(this);  
 userAnswerTextView.setText("Your answer: " + userAnswer);  
 quizDetailsLayout.addView(userAnswerTextView);  
 }  
 // 메인 메뉴로 돌아가기 버튼 클릭 시  
 mainMenuButton.setOnClickListener(v -> {  
 Intent mainMenuIntent = new Intent(Quiz1Result.this, MainActivity.class);  
 startActivity(mainMenuIntent);  
 finish();  
 });  
 }  
}

Quiz2.java

package kr.ac.yuhan.cs.andriodproject\_cute\_jo;  
  
import android.content.Intent;  
import android.graphics.Color;  
import android.os.Bundle;  
import android.os.Handler;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
import android.widget.Toast;  
import androidx.appcompat.app.AppCompatActivity;  
  
import java.util.ArrayList;  
import java.util.Arrays;  
import java.util.Collections;  
import java.util.List;  
import java.util.Random;  
  
public class Quiz2 extends AppCompatActivity {  
  
 private TextView question;  
 private Button answer1Button, answer2Button, answer3Button, answer4Button;  
 private String[] questions;  
 private String[] answers;  
 private Random random;  
  
 private int currentQuestionIndex = 0;  
 private int correctAnswerIndex = 0;  
 private int correctCount = 0; // 맞힌 문제 수  
 private int currentQuizCount = 0; // 현재 진행 중인 퀴즈 횟수  
 private static final int *TOTAL\_QUIZZES* = 10; // 퀴즈 횟수  
  
 // 퀴즈 질문과 답변을 저장할 리스트  
 private List<String> quizQuestions;  
 private List<String> userAnswers;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*quiz2*);  
// 돌아가기 버튼 클릭 시  
 Button back = (Button) findViewById(R.id.*back*);  
 back.setOnClickListener(new View.OnClickListener(){  
  
 @Override  
 public void onClick(View view){  
 Intent intent = new Intent(getApplicationContext(), MainActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 question = findViewById(R.id.*question*);  
 answer1Button = findViewById(R.id.*answer1*);  
 answer2Button = findViewById(R.id.*answer2*);  
 answer3Button = findViewById(R.id.*answer3*);  
 answer4Button = findViewById(R.id.*answer4*);  
  
 random = new Random();  
 questions = new String[]{"ア", "イ", "ウ", "エ", "オ",  
 "カ", "キ", "ク", "ケ", "コ", "サ", "シ", "ス", "セ", "ソ",  
 "タ", "チ", "ツ", "テ", "ト", "ナ", "ニ", "ヌ", "ネ", "ノ",  
 "ハ", "ヒ", "フ", "ヘ", "ホ", "マ", "ミ", "ム", "メ", "モ",  
 "ヤ", "ユ", "ヨ", "ラ", "リ", "ル", "レ", "ロ", "ワ", "ヲ", "ン"};  
  
 answers = new String[]{"a", "i", "u", "e", "o",  
 "ka", "ki", "ku", "ke", "ko", "sa", "shi", "su", "se", "so",  
 "ta", "chi", "tsu", "te", "to", "na", "ni", "nu", "ne", "no",  
 "ha", "hi", "fu", "he", "ho", "ma", "mi", "mu", "me", "mo",  
 "ya", "yu", "yo", "ra", "ri", "ru", "re", "ro", "wa", "wo", "n"};  
 // 리스트 초기화  
 quizQuestions = new ArrayList<>();  
 userAnswers = new ArrayList<>();  
 loadQuestion();  
  
 View.OnClickListener answerButtonClickListener = new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 checkAnswer(v);  
 }  
 };  
  
 answer1Button.setOnClickListener(answerButtonClickListener);  
 answer2Button.setOnClickListener(answerButtonClickListener);  
 answer3Button.setOnClickListener(answerButtonClickListener);  
 answer4Button.setOnClickListener(answerButtonClickListener);  
 }  
  
 private void loadQuestion() {  
 currentQuizCount++;  
 if (currentQuizCount > *TOTAL\_QUIZZES*) {  
 endQuiz();  
 return;  
 }  
  
 currentQuestionIndex = random.nextInt(questions.length);  
 question.setText(questions[currentQuestionIndex]);  
  
 List<String> options = new ArrayList<>();  
 options.add(answers[currentQuestionIndex]);  
 while (options.size() < 4) {  
 int wrongAnswerIndex = random.nextInt(answers.length);  
 if (wrongAnswerIndex != currentQuestionIndex && !options.contains(answers[wrongAnswerIndex])) {  
 options.add(answers[wrongAnswerIndex]);  
 }  
 }  
 Collections.*shuffle*(options);  
  
 answer1Button.setText(options.get(0));  
 answer2Button.setText(options.get(1));  
 answer3Button.setText(options.get(2));  
 answer4Button.setText(options.get(3));  
  
 correctAnswerIndex = options.indexOf(answers[currentQuestionIndex]);  
  
 resetButtonColors();  
 }  
  
 private void resetButtonColors() {  
 answer1Button.setBackgroundColor(Color.*WHITE*);  
 answer2Button.setBackgroundColor(Color.*WHITE*);  
 answer3Button.setBackgroundColor(Color.*WHITE*);  
 answer4Button.setBackgroundColor(Color.*WHITE*);  
 }  
  
 private void checkAnswer(View v) {  
 int selectedAnswerIndex = -1;  
 if (v.getId() == R.id.*answer1*) {  
 selectedAnswerIndex = 0;  
 } else if (v.getId() == R.id.*answer2*) {  
 selectedAnswerIndex = 1;  
 } else if (v.getId() == R.id.*answer3*) {  
 selectedAnswerIndex = 2;  
 } else if (v.getId() == R.id.*answer4*) {  
 selectedAnswerIndex = 3;  
 }  
  
 // 사용자 답변 저장  
 String userAnswer = "";  
 switch (selectedAnswerIndex) {  
 case 0: userAnswer = answer1Button.getText().toString(); break;  
 case 1: userAnswer = answer2Button.getText().toString(); break;  
 case 2: userAnswer = answer3Button.getText().toString(); break;  
 case 3: userAnswer = answer4Button.getText().toString(); break;  
 }  
 quizQuestions.add(questions[currentQuestionIndex] + " -> " + answers[currentQuestionIndex]);  
 userAnswers.add(userAnswer);  
  
 if (selectedAnswerIndex == correctAnswerIndex) {  
 v.setBackgroundColor(Color.*GREEN*);  
 correctCount++;  
 Toast.*makeText*(this, "Correct!", Toast.*LENGTH\_SHORT*).show();  
 } else {  
 v.setBackgroundColor(Color.*RED*);  
 Toast.*makeText*(this, "Incorrect!", Toast.*LENGTH\_SHORT*).show();  
 if (correctAnswerIndex == 0) answer1Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 1) answer2Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 2) answer3Button.setBackgroundColor(Color.*GREEN*);  
 else if (correctAnswerIndex == 3) answer4Button.setBackgroundColor(Color.*GREEN*);  
 }  
  
 new Handler().postDelayed(new Runnable() {  
 @Override  
 public void run() {  
 loadQuestion();  
 }  
 }, 1000);  
 }  
  
 private void endQuiz() {  
 // 퀴즈 결과 저장  
 Intent intent = new Intent(Quiz2.this, Quiz2Result.class);  
 intent.putExtra("correctCount", correctCount);  
 intent.putExtra("totalQuizzes", *TOTAL\_QUIZZES*);  
 intent.putStringArrayListExtra("quizQuestions", (ArrayList<String>) quizQuestions);  
 intent.putStringArrayListExtra("userAnswers", (ArrayList<String>) userAnswers);  
 startActivity(intent);  
 finish();  
 }  
  
 private void disableButtons() {  
 answer1Button.setEnabled(false);  
 answer2Button.setEnabled(false);  
 answer3Button.setEnabled(false);  
 answer4Button.setEnabled(false);  
 }  
}

Quiz2.Result.java

package kr.ac.yuhan.cs.andriodproject\_cute\_jo;  
  
import android.annotation.SuppressLint;  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.LinearLayout;  
import android.widget.TextView;  
import androidx.appcompat.app.AppCompatActivity;  
  
import java.util.List;  
  
public class Quiz2Result extends AppCompatActivity {  
  
 private TextView resultTextView;  
 private Button mainMenuButton;  
 private LinearLayout quizDetailsLayout;  
  
 @SuppressLint("MissingInflatedId")  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*quiz2\_result*);  
  
 resultTextView = findViewById(R.id.*result\_text\_view*);  
 mainMenuButton = findViewById(R.id.*main\_menu\_button*);  
 quizDetailsLayout = findViewById(R.id.*quiz\_details\_layout*);  
  
 // 퀴즈 결과 가져오기  
 Intent intent = getIntent();  
 int correctCount = intent.getIntExtra("correctCount", 0);  
 int totalQuizzes = intent.getIntExtra("totalQuizzes", 10);  
 List<String> quizQuestions = intent.getStringArrayListExtra("quizQuestions");  
 List<String> userAnswers = intent.getStringArrayListExtra("userAnswers");  
  
 // 결과 표시  
 resultTextView.setText("You got " + correctCount + " out of " + totalQuizzes + " correct.");  
  
 for (int i = 0; i < quizQuestions.size(); i++) {  
 String question = quizQuestions.get(i);  
 String userAnswer = userAnswers.get(i);  
  
 TextView questionTextView = new TextView(this);  
 questionTextView.setText((i + 1) + ". " + question);  
 quizDetailsLayout.addView(questionTextView);  
  
 TextView userAnswerTextView = new TextView(this);  
 userAnswerTextView.setText("Your answer: " + userAnswer);  
 quizDetailsLayout.addView(userAnswerTextView);  
 }  
 // 메인 메뉴로 돌아가기 버튼 클릭 시  
 mainMenuButton.setOnClickListener(v -> {  
 Intent mainMenuIntent = new Intent(Quiz2Result.this, MainActivity.class);  
 startActivity(mainMenuIntent);  
 finish();  
 });  
 }  
}

quiz1.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
 <Button  
 android:id="@+id/back"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="돌아가기" />  
  
 <TextView  
 android:id="@+id/question"  
 android:layout\_width="match\_parent"  
 android:layout\_height="246dp"  
 android:layout\_marginBottom="80dp"  
 android:gravity="center"  
 android:textSize="30sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 tools:layout\_editor\_absoluteY="-1dp" />  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:weightSum="2"  
 android:layout\_marginBottom="10dp">  
  
 <android.widget.Button  
 android:id="@+id/answer1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="16dp"  
 tools:layout\_editor\_absoluteY="358dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginLeft="5dp"  
 android:layout\_marginRight="10dp"  
 android:textColor="@color/black"/>  
  
 <android.widget.Button  
 android:id="@+id/answer2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="208dp"  
 tools:layout\_editor\_absoluteY="540dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginRight="5dp"  
 android:textColor="@color/black"/>  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <android.widget.Button  
 android:id="@+id/answer3"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="16dp"  
 tools:layout\_editor\_absoluteY="358dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginLeft="5dp"  
 android:layout\_marginRight="10dp"  
 android:textColor="@color/black"/>  
  
 <android.widget.Button  
 android:id="@+id/answer4"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="208dp"  
 tools:layout\_editor\_absoluteY="540dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginRight="5dp"  
 android:textColor="@color/black"/>  
 </LinearLayout>  
</LinearLayout>

quiz1\_result.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:gravity="center"  
 android:orientation="vertical"  
 android:padding="16dp">  
  
 <TextView  
 android:id="@+id/result\_text\_view"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:textSize="24sp"  
 android:text="Quiz Result"  
 android:layout\_marginBottom="24dp" />  
  
 <LinearLayout  
 android:id="@+id/quiz\_details\_layout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:layout\_weight="1"  
 android:orientation="vertical" />  
  
 <Button  
 android:id="@+id/main\_menu\_button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Main Menu" />  
</LinearLayout>

quiz2.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
 <Button  
 android:id="@+id/back"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="돌아가기" />  
  
 <TextView  
 android:id="@+id/question"  
 android:layout\_width="match\_parent"  
 android:layout\_height="246dp"  
 android:layout\_marginBottom="80dp"  
 android:gravity="center"  
 android:textSize="30sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 tools:layout\_editor\_absoluteY="-1dp" />  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:weightSum="2"  
 android:layout\_marginBottom="10dp">  
  
 <android.widget.Button  
 android:id="@+id/answer1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="16dp"  
 tools:layout\_editor\_absoluteY="358dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginLeft="5dp"  
 android:layout\_marginRight="10dp"/>  
  
 <android.widget.Button  
 android:id="@+id/answer2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="208dp"  
 tools:layout\_editor\_absoluteY="540dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginRight="5dp"/>  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 android:weightSum="2">  
  
 <android.widget.Button  
 android:id="@+id/answer3"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="16dp"  
 tools:layout\_editor\_absoluteY="358dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginLeft="5dp"  
 android:layout\_marginRight="10dp"/>  
  
 <android.widget.Button  
 android:id="@+id/answer4"  
 android:layout\_width="match\_parent"  
 android:layout\_height="170dp"  
 android:layout\_weight="1"  
 tools:layout\_editor\_absoluteX="208dp"  
 tools:layout\_editor\_absoluteY="540dp"  
 android:background="@drawable/quiz\_btn"  
 android:layout\_marginRight="5dp"/>  
 </LinearLayout>  
</LinearLayout>

quiz2\_result.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:gravity="center"  
 android:orientation="vertical"  
 android:padding="16dp">  
  
 <TextView  
 android:id="@+id/result\_text\_view"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:textSize="24sp"  
 android:text="Quiz Result"  
 android:layout\_marginBottom="24dp" />  
  
 <LinearLayout  
 android:id="@+id/quiz\_details\_layout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:layout\_weight="1"  
 android:orientation="vertical" />  
  
 <Button  
 android:id="@+id/main\_menu\_button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Main Menu" />  
</LinearLayout>

팀원 – 고은별

º 프로젝트 문서 초안 작성

º 팀 프로젝트 문서 진행 중인 상황 작성, 추가해야 할 내용 수정 및 검토

º 간트차트 초안 작성 및 수정, 검토

팀원 – 김아름

º프로젝트 기획 및 메인화면 디자인 틀 초안 작성

º 프로젝트 문서 초안 작성

º 프로젝트 코딩 기초 설계

º 메인화면 작성 ( 대표엠블럼, 작성한 디자인 토대로 작성)

º 메인화면에서 버튼 누를시 다른 페이지로 넘어가게끔 코드 작성

º 서브페이지 작성

메인 xml <activity\_main.xml>

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="center\_horizontal"  
 tools:context="kr.ac.yuhan.cs.andriodproject\_cute\_jo.MainActivity"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="297dp"  
 android:layout\_height="375dp"  
 android:layout\_gravity="center"  
 android:layout\_marginTop="50dp"  
 app:srcCompat="@drawable/frog"  
 tools:layout\_editor\_absoluteX="57dp"  
 tools:layout\_editor\_absoluteY="85dp" />  
  
 <android.widget.Button  
 android:id="@+id/hiragana"  
 android:layout\_width="312dp"  
 android:layout\_height="70dp"  
 android:layout\_gravity="center"  
 android:layout\_marginTop="50dp"  
 android:layout\_marginBottom="30dp"  
 android:alpha="50"  
 android:background="@drawable/btn"  
 android:fontFamily="@font/murukmuruk"  
 android:text="히라가나\nひらがな"  
 android:textSize="18sp"  
 app:iconSize="18dp"  
 tools:layout\_editor\_absoluteX="49dp"  
 tools:layout\_editor\_absoluteY="460dp" />  
  
 <android.widget.Button  
 android:id="@+id/gatakana"  
 android:layout\_width="312dp"  
 android:layout\_height="70dp"  
 android:layout\_gravity="center"  
 android:background="@drawable/btn"  
 android:fontFamily="@font/murukmuruk"  
 android:text="가타카나\nカタカナ"  
 android:textSize="18sp"  
 app:iconSize="18dp"  
 tools:layout\_editor\_absoluteX="49dp"  
 tools:layout\_editor\_absoluteY="553dp" />  
  
</LinearLayout>

메인 java 작성 <MainActivity.java>

package kr.ac.yuhan.cs.andriodproject\_cute\_jo;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
  
 // 히라가나 버튼 클릭 시  
 Button hiragana = (Button) findViewById(R.id.*hiragana*);  
 hiragana.setOnClickListener(new View.OnClickListener(){  
  
 @Override  
 public void onClick(View view){  
 Intent intent = new Intent(getApplicationContext(), hiragana.class);  
 startActivity(intent);  
 }  
 });  
  
  
 // 가타카나 버튼 클릭 시  
 Button gatakana = (Button) findViewById(R.id.*gatakana*);  
 gatakana.setOnClickListener(new View.OnClickListener(){  
  
 @Override  
 public void onClick(View view){  
 Intent intent = new Intent(getApplicationContext(), gatakana.class);  
 startActivity(intent);  
 }  
 });  
 }  
}

버튼 디자인 xml작성 <btn.xml>

<shape  
 xmlns:android="http://schemas.android.com/apk/res/android">  
  
 <solid android:color="#007354"/>  
  
 <stroke  
 android:width="1dp"  
 android:color="#111"/>  
 <corners  
 android:topLeftRadius="300dp"  
 android:topRightRadius="300dp"  
 android:bottomLeftRadius="300dp"  
 android:bottomRightRadius="300dp"/>  
</shape>

폰트 xml 작성

<?xml version="1.0" encoding="utf-8"?>  
<font-family  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto">  
  
 <font  
 android:font="@font/murukmuruk"  
 android:fontStyle="normal"  
 app:font="@font/murukmuruk"  
 app:fontStyle="normal"/>  
</font-family>

퀴즈 페이지 초안 <Quiz1.java, Quiz2.java>

package kr.ac.yuhan.cs.andriodproject\_cute\_jo;

import android.content.Intent;

import android.graphics.Color;

import android.os.Bundle;

import android.os.Handler;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class Quiz1 extends AppCompatActivity {

private TextView questionTextView;

private Button answer1Button, answer2Button, answer3Button, answer4Button;

private String[] questions = {

"Question 1?",

"Question 2?",

"Question 3?",

"Question 4?",

"Question 5?",

"Question 6?",

"Question 7?",

"Question 8?",

"Question 9?",

"Question 10?"

};

private String[][] answers = {

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"},

{"Answer 1", "Answer 2", "Answer 3", "Answer 4"}

};

// 모든 정답을 1번(첫 번째 선택지)으로 설정

private int[] correctAnswers = {0, 0, 0, 0, 0, 0, 0, 0, 0, 0};

private int currentQuestionIndex = 0;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.quiz1);

questionTextView = findViewById(R.id.question);

answer1Button = findViewById(R.id.answer1);

answer2Button = findViewById(R.id.answer2);

answer3Button = findViewById(R.id.answer3);

answer4Button = findViewById(R.id.answer4);

loadQuestion();

View.OnClickListener answerButtonClickListener = new View.OnClickListener() {

@Override

public void onClick(View v) {

checkAnswer(v);

}

};

answer1Button.setOnClickListener(answerButtonClickListener);

answer2Button.setOnClickListener(answerButtonClickListener);

answer3Button.setOnClickListener(answerButtonClickListener);

answer4Button.setOnClickListener(answerButtonClickListener);

}

private void loadQuestion() {

questionTextView.setText(questions[currentQuestionIndex]);

answer1Button.setText(answers[currentQuestionIndex][0]);

answer2Button.setText(answers[currentQuestionIndex][1]);

answer3Button.setText(answers[currentQuestionIndex][2]);

answer4Button.setText(answers[currentQuestionIndex][3]);

resetButtonColors();

}

private void resetButtonColors() {

answer1Button.setBackgroundColor(Color.parseColor("#00ffffff"));

answer2Button.setBackgroundColor(Color.parseColor("#00ffffff"));

answer3Button.setBackgroundColor(Color.parseColor("#00ffffff"));

answer4Button.setBackgroundColor(Color.parseColor("#00ffffff"));

}

private void checkAnswer(View v) {

int selectedAnswerIndex = -1;

if (v.getId() == R.id.answer1) {

selectedAnswerIndex = 0;

} else if (v.getId() == R.id.answer2) {

selectedAnswerIndex = 1;

} else if (v.getId() == R.id.answer3) {

selectedAnswerIndex = 2;

} else if (v.getId() == R.id.answer4) {

selectedAnswerIndex = 3;

}

if (selectedAnswerIndex == correctAnswers[currentQuestionIndex]) {

v.setBackgroundColor(Color.GREEN);

Toast.makeText(this, "Correct!", Toast.LENGTH\_SHORT).show();

} else {

v.setBackgroundColor(Color.RED);

Toast.makeText(this, "Incorrect!", Toast.LENGTH\_SHORT).show();

// Highlight the correct answer

answer1Button.setBackgroundColor(Color.GREEN);

}

currentQuestionIndex++;

if (currentQuestionIndex < questions.length) {

// Delay before loading the next question

new Handler().postDelayed(new Runnable() {

@Override

public void run() {

loadQuestion();

}

}, 1000); // 1 second delay

} else {

Toast.makeText(this, "Quiz Finished!", Toast.LENGTH\_LONG).show();

disableButtons();

}

}

private void disableButtons() {

answer1Button.setEnabled(false);

answer2Button.setEnabled(false);

answer3Button.setEnabled(false);

answer4Button.setEnabled(false);

}

}

퀴즈 페이지 레이아웃 작성 <quiz1.xml, quiz2.xml>

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout

xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical">

<TextView

android:id="@+id/question"

android:layout\_width="match\_parent"

android:layout\_height="300dp"

android:gravity="center"

android:textSize="30sp"

app:layout\_constraintStart\_toStartOf="parent"

tools:layout\_editor\_absoluteY="-1dp"

android:layout\_marginBottom="80dp" />

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

android:weightSum="2"

android:layout\_marginBottom="10dp">

<Button

android:id="@+id/answer1"

android:layout\_width="match\_parent"

android:layout\_height="170dp"

android:layout\_weight="1"

tools:layout\_editor\_absoluteX="16dp"

tools:layout\_editor\_absoluteY="358dp"

android:background="@drawable/quiz\_btn"

android:layout\_marginLeft="5dp"

android:layout\_marginRight="10dp"/>

<Button

android:id="@+id/answer2"

android:layout\_width="match\_parent"

android:layout\_height="170dp"

android:layout\_weight="1"

tools:layout\_editor\_absoluteX="208dp"

tools:layout\_editor\_absoluteY="540dp"

android:background="@drawable/quiz\_btn"

android:layout\_marginRight="5dp"/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

android:weightSum="2">

<Button

android:id="@+id/answer3"

android:layout\_width="match\_parent"

android:layout\_height="170dp"

android:layout\_weight="1"

tools:layout\_editor\_absoluteX="16dp"

tools:layout\_editor\_absoluteY="358dp"

android:background="@drawable/quiz\_btn"

android:layout\_marginLeft="5dp"

android:layout\_marginRight="10dp"/>

<Button

android:id="@+id/answer4"

android:layout\_width="match\_parent"

android:layout\_height="170dp"

android:layout\_weight="1"

tools:layout\_editor\_absoluteX="208dp"

tools:layout\_editor\_absoluteY="540dp"

android:background="@drawable/quiz\_btn"

android:layout\_marginRight="5dp"/>

</LinearLayout>

</LinearLayout>

팀원 – 이유진

º 프로젝트 디자인 일러스트 초안 작성

º 프로젝트 대표엠블럼 기획 및 디자인

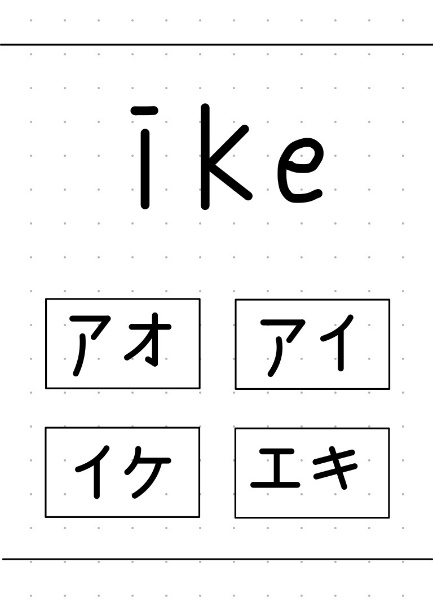
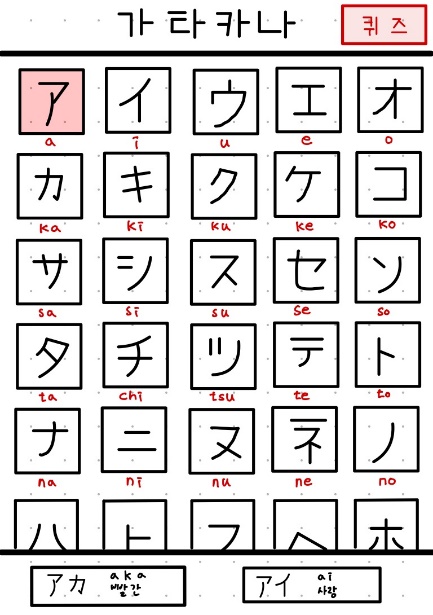
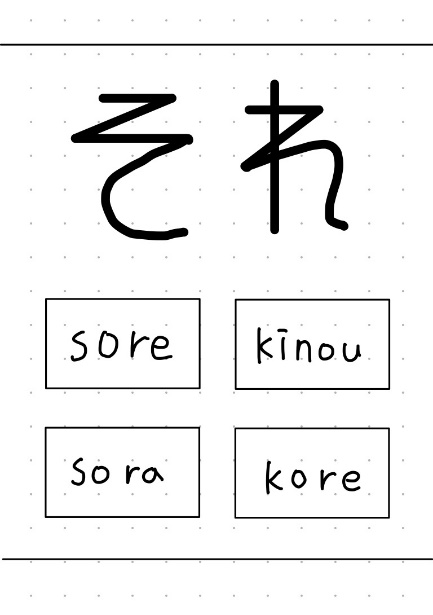
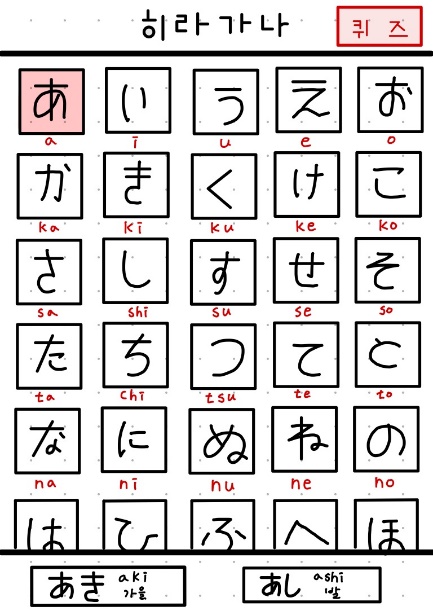
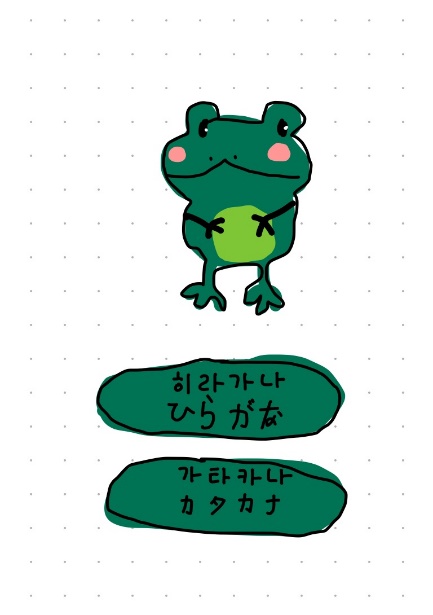
º 손그림으로 작성한 프로젝트 일본어 단어, 버튼, 퀴즈 디자인 작성

º 수작업으로 프로젝트 방향성을 담은 메인화면, 실행화면, 정답 및 오답 디자인 작성

º 서브페이지 작성 (히라가나, 가타카나 페이지)

º 간트차트 수정 및 검토

º 서브페이지에서 메인페이지로 가는 ‘뒤로가기’ 버튼 이벤트 추가

**

* 서브페이지1(gatakana.xml)

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:backgroundTint="#007354"

android:orientation="vertical"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="91dp"

android:orientation="horizontal">

<Button

android:id="@+id/back"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="moveButton"

android:text="돌아가기" />

<Button

android:id="@+id/quiz"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Quiz" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_a"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ア\n[ a ]" />

<Button

android:id="@+id/katakana\_i"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="イ\n[ i ]" />

<Button

android:id="@+id/katakana\_u"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ウ\n[ u ]" />

<Button

android:id="@+id/katakana\_e"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="エ\n[ e ]" />

<Button

android:id="@+id/katakana\_o"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="オ\n[ o ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_ka"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="カ\n[ka]" />

<Button

android:id="@+id/katakana\_ki"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="キ\n[ ki ]" />

<Button

android:id="@+id/katakana\_ku"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ク\n[ku]" />

<Button

android:id="@+id/katakana\_ke"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ケ\n[ke]" />

<Button

android:id="@+id/katakana\_ko"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="コ\n[ko]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_sa"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="サ\n[sa]" />

<Button

android:id="@+id/katakana\_shi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="シ\n[shi]" />

<Button

android:id="@+id/katakana\_su"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ス\n[su]" />

<Button

android:id="@+id/katakana\_se"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="セ\n[se]" />

<Button

android:id="@+id/katakana\_so"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ソ\n[so]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_ta"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="タ\n[ ta ]" />

<Button

android:id="@+id/katakana\_chi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="チ\n[chi]" />

<Button

android:id="@+id/katakana\_tsu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ツ\n[tsu]" />

<Button

android:id="@+id/katakana\_te"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="テ\n[ te ]" />

<Button

android:id="@+id/katakana\_to"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ト\n[ to ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_na"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ナ\n[na]" />

<Button

android:id="@+id/katakana\_ni"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ニ\n[ ni ]" />

<Button

android:id="@+id/katakana\_nu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ヌ\n[nu]" />

<Button

android:id="@+id/katakana\_ne"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ネ\n[ne]" />

<Button

android:id="@+id/katakana\_no"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ノ\n[no]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_ha"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ハ\n[ha]" />

<Button

android:id="@+id/katakana\_hi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ヒ\n[ hi ]" />

<Button

android:id="@+id/katakana\_fu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="フ\n[ fu ]" />

<Button

android:id="@+id/katakana\_he"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ヘ\n[he]" />

<Button

android:id="@+id/katakana\_ho"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ホ\n[ho]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_ma"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="マ\n[ma]" />

<Button

android:id="@+id/katakana\_mi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ミ\n[mi]" />

<Button

android:id="@+id/katakana\_mu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ム\n[mu]" />

<Button

android:id="@+id/katakana\_me"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="メ\n[me]" />

<Button

android:id="@+id/katakana\_mo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="モ\n[mo]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_ya"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ヤ\n[ ya ]" />

<Button

android:id="@+id/katakana\_yu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ユ\n[yu]" />

<Button

android:id="@+id/katakana\_yo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ヨ\n[yo]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_ra"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ラ\n[ ra ]" />

<Button

android:id="@+id/katakana\_ri"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="リ\n[ ri ]" />

<Button

android:id="@+id/katakana\_ru"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ル\n[ ru ]" />

<Button

android:id="@+id/katakana\_re"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="レ\n[ re ]" />

<Button

android:id="@+id/katakana\_ro"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ロ\n[ ro ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/katakana\_wa"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ワ\n[wa]" />

<Button

android:id="@+id/katakana\_wo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:gravity="center\_horizontal"

android:text="ヲ\n[wo]" />

<Button

android:id="@+id/katakana\_n"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ン\n[ n ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="horizontal">

<TextView

android:id="@+id/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="match\_parent"

android:text=""

android:padding="20dp"

android:textSize="18sp" />

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="match\_parent"

android:text=""

android:padding="20dp"

android:textSize="18sp" />

</LinearLayout>

</LinearLayout>

* 서브페이지 1(gatakana.java)
* package kr.ac.yuhan.cs.andriodproject\_cute\_jo;
* import android.content.Intent;
* import android.os.Bundle;
* import android.view.View;
* import android.widget.Button;
* import android.widget.TextView;
* import androidx.annotation.Nullable;
* import androidx.appcompat.app.AppCompatActivity;
* public class gatakana extends AppCompatActivity {
* @Override
* protected void onCreate(@Nullable Bundle savedInstanceState) {
* super.onCreate(savedInstanceState);
* setContentView(R.layout.gatakana);
* TextView textView1 = findViewById(R.id.textView1);
* TextView textView2 = findViewById(R.id.textView2);
* Button katakana\_a = findViewById(R.id.katakana\_a);
* Button katakana\_i = findViewById(R.id.katakana\_i);
* Button katakana\_u = findViewById(R.id.katakana\_u);
* Button katakana\_e = findViewById(R.id.katakana\_e);
* Button katakana\_o = findViewById(R.id.katakana\_o);
* Button katakana\_ka = findViewById(R.id.katakana\_ka);
* Button katakana\_ki = findViewById(R.id.katakana\_ki);
* Button katakana\_ku = findViewById(R.id.katakana\_ku);
* Button katakana\_ke = findViewById(R.id.katakana\_ke);
* Button katakana\_ko = findViewById(R.id.katakana\_ko);
* Button katakana\_sa = findViewById(R.id.katakana\_sa);
* Button katakana\_shi = findViewById(R.id.katakana\_shi);
* Button katakana\_su = findViewById(R.id.katakana\_su);
* Button katakana\_se = findViewById(R.id.katakana\_se);
* Button katakana\_so = findViewById(R.id.katakana\_so);
* Button katakana\_ta = findViewById(R.id.katakana\_ta);
* Button katakana\_chi = findViewById(R.id.katakana\_chi);
* Button katakana\_tsu = findViewById(R.id.katakana\_tsu);
* Button katakana\_te = findViewById(R.id.katakana\_te);
* Button katakana\_to = findViewById(R.id.katakana\_to);
* Button katakana\_na = findViewById(R.id.katakana\_na);
* Button katakana\_ni = findViewById(R.id.katakana\_ni);
* Button katakana\_nu = findViewById(R.id.katakana\_nu);
* Button katakana\_ne = findViewById(R.id.katakana\_ne);
* Button katakana\_no = findViewById(R.id.katakana\_no);
* Button katakana\_ha = findViewById(R.id.katakana\_ha);
* Button katakana\_hi = findViewById(R.id.katakana\_hi);
* Button katakana\_fu = findViewById(R.id.katakana\_fu);
* Button katakana\_he = findViewById(R.id.katakana\_he);
* Button katakana\_ho = findViewById(R.id.katakana\_ho);
* Button katakana\_ma = findViewById(R.id.katakana\_ma);
* Button katakana\_mi = findViewById(R.id.katakana\_mi);
* Button katakana\_mu = findViewById(R.id.katakana\_mu);
* Button katakana\_me = findViewById(R.id.katakana\_me);
* Button katakana\_mo = findViewById(R.id.katakana\_mo);
* Button katakana\_ya = findViewById(R.id.katakana\_ya);
* Button katakana\_yu = findViewById(R.id.katakana\_yu);
* Button katakana\_yo = findViewById(R.id.katakana\_yo);
* Button katakana\_ra = findViewById(R.id.katakana\_ra);
* Button katakana\_ri = findViewById(R.id.katakana\_ri);
* Button katakana\_ru = findViewById(R.id.katakana\_ru);
* Button katakana\_re = findViewById(R.id.katakana\_re);
* Button katakana\_ro = findViewById(R.id.katakana\_ro);
* Button katakana\_wa = findViewById(R.id.katakana\_wa);
* Button katakana\_wo = findViewById(R.id.katakana\_wo);
* Button katakana\_n = findViewById(R.id.katakana\_n);
* Button back = (Button) findViewById(R.id.back);
* back.setOnClickListener(new View.OnClickListener(){
* @Override
* public void onClick(View view){
* Intent intent = new Intent(getApplicationContext(), MainActivity.class);
* startActivity(intent);
* }
* });
* katakana\_a.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("アメ [ame] 비");
* textView2.setText("アセ [ase] 땀");
* }
* });
* katakana\_i.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("イイ [ii] 좋은");
* textView2.setText("アイ [ai] 사랑");
* }
* });
* katakana\_u.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ウマ [uma] 말");
* textView2.setText("ウチ [uchi] 집");
* }
* });
* katakana\_e.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ナマエ [namae] 이름");
* textView2.setText("コエ [koe] 목소리");
* }
* });
* katakana\_o.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("シオ [shio] 소금");
* textView2.setText("カオ [kao] 얼굴");
* }
* });
* katakana\_ka.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("カク [kaku] 쓰다");
* textView2.setText("アカ [aka] 빨간");
* }
* });
* katakana\_ki.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("セキ [seki] 자리");
* textView2.setText("ユキ [yuki] 눈");
* }
* });
* katakana\_ku.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("クチ [kuchi] 입");
* textView2.setText("クロ [kuro] 검은색");
* }
* });
* katakana\_ke.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("サケ [sake] 주류");
* textView2.setText("イケ [ike] 연못");
* }
* });
* katakana\_ko.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ネコ [neko] 고양이");
* textView2.setText("タコ [tako] 문어");
* }
* });
* katakana\_sa.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("アサ [asa] 아침");
* textView2.setText("サカナ [sakana] 물고기");
* }
* });
* katakana\_shi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ホシ [hoshi] 별");
* textView2.setText("スシ [sushi] 스시");
* }
* });
* katakana\_su.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("スシ [sushi] 스시");
* textView2.setText("ヤスミ [yasumi] 휴일");
* }
* });
* katakana\_se.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("セキ [seki] 자리");
* textView2.setText("アセ [ase] 땀");
* }
* });
* katakana\_so.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ミソ [miso] 미소");
* textView2.setText("ソラ [sora] 하늘");
* }
* });
* katakana\_ta.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("アナタ [anata] 당신");
* textView2.setText("シタ [shita] 밑");
* }
* });
* katakana\_chi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("イチ [ichi] 일");
* textView2.setText("ウチ [uchi] 집");
* }
* });
* katakana\_tsu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("イツ [natsu] 언제");
* textView2.setText("クツ[kutsu] 신발");
* }
* });
* katakana\_te.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("チカテツ [chikatetsu] 지하철");
* textView2.setText("");
* }
* });
* katakana\_to.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ヒト [hito] 사람들");
* textView2.setText("トケイ [tokei] 시계");
* }
* });
* katakana\_na.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ナナ [nana] 칠");
* textView2.setText("ハナ [hana] 꽃");
* }
* });
* katakana\_ni.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ニク [niku] 고기");
* textView2.setText("ナニ [nani] 무엇");
* }
* });
* katakana\_nu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("イヌ [inu] 개");
* textView2.setText("");
* }
* });
* katakana\_ne.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("フネ [fune] 선박");
* textView2.setText("オカネ [okane] 돈");
* }
* });
* katakana\_no.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("キノウ [kinou] 어제");
* textView2.setText("ココノツ [kokonotsu] 아홉");
* }
* });
* katakana\_ha.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ハコ [hako] 상자");
* textView2.setText("ハル [haru] 봄");
* }
* });
* katakana\_hi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ヒト [hito] 사람들");
* textView2.setText("ヒトツ [hitotsu] 하나");
* }
* });
* katakana\_fu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("フク [fuku] 옷");
* textView2.setText("フユ [fuyu] 겨울");
* }
* });
* katakana\_he.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ヘタ [heta] 잘 못하는");
* textView2.setText("");
* }
* });
* katakana\_ho.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ホシ [hoshi] 별");
* textView2.setText("");
* }
* });
* katakana\_ma.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("クマ [kuma] 곰");
* textView2.setText("ウマ [uma] 말");
* }
* });
* katakana\_mi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ミミ [mimi] 귀");
* textView2.setText("ミソ [miso] 미소");
* }
* });
* katakana\_mu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ムシ [mushi] 곤충");
* textView2.setText("");
* }
* });
* katakana\_me.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ユメ [yume] 꿈");
* textView2.setText("アメ [ame] 비");
* }
* });
* katakana\_mo.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("モモ [momo] 허벅지");
* textView2.setText("");
* }
* });
* katakana\_ya.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ヤスミ [yasumi] 휴일");
* textView2.setText("");
* }
* });
* katakana\_yu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ユメ [yume] 꿈");
* textView2.setText("ユキ [yuki] 눈");
* }
* });
* katakana\_yo.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("オハヨウ [ohayou] 좋은아침");
* textView2.setText("");
* }
* });
* katakana\_ra.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("アラウ [arau] 씻다");
* textView2.setText("ソラ [sora] 하늘");
* }
* });
* katakana\_ri.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ヤキトリ [yakitori] 야키토리");
* textView2.setText("");
* }
* });
* katakana\_ru.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ワルイ [warui] 나쁜");
* textView2.setText("サル [saru] 원숭이");
* }
* });
* katakana\_re.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("コレ [kore] 이");
* textView2.setText("ソレ [sore] 저");
* }
* });
* katakana\_ro.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ロク [roku] 육");
* textView2.setText("キイロ [kiiro] 노란색");
* }
* });
* katakana\_wa.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ワタシ [watashi] 나");
* textView2.setText("");
* }
* });
* katakana\_wo.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("");
* textView2.setText("");
* }
* });
* katakana\_n.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("");
* textView2.setText("");
* }
* });
* }
* }
* 서브페이지2(hiragana.xml)

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:backgroundTint="#007354"

android:orientation="vertical"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="91dp"

android:orientation="horizontal">

<Button

android:id="@+id/back"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="돌아가기" />

<Button

android:id="@+id/quiz"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Quiz" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_a"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="あ\n[ a ]" />

<Button

android:id="@+id/hiragana\_i"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="い\n[ i ]" />

<Button

android:id="@+id/hiragana\_u"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="う\n[ u ]" />

<Button

android:id="@+id/hiragana\_e"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="え\n[ e ]" />

<Button

android:id="@+id/hiragana\_o"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="お\n[ o ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_ka"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="か\n[ka]" />

<Button

android:id="@+id/hiragana\_ki"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="き\n[ ki ]" />

<Button

android:id="@+id/hiragana\_ku"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="く\n[ku]" />

<Button

android:id="@+id/hiragana\_ke"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="け\n[ke]" />

<Button

android:id="@+id/hiragana\_ko"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="こ\n[ko]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_sa"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="さ\n[sa]" />

<Button

android:id="@+id/hiragana\_shi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="し\n[shi]" />

<Button

android:id="@+id/hiragana\_su"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="す\n[su]" />

<Button

android:id="@+id/hiragana\_se"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="せ\n[se]" />

<Button

android:id="@+id/hiragana\_so"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="そ\n[so]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_ta"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="た\n[ ta ]" />

<Button

android:id="@+id/hiragana\_chi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ち\n[chi]" />

<Button

android:id="@+id/hiragana\_tsu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="つ\n[tsu]" />

<Button

android:id="@+id/hiragana\_te"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="て\n[ te ]" />

<Button

android:id="@+id/hiragana\_to"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="と\n[ to ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_na"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="な\n[na]" />

<Button

android:id="@+id/hiragana\_ni"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="に\n[ ni ]" />

<Button

android:id="@+id/hiragana\_nu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ぬ\n[nu]" />

<Button

android:id="@+id/hiragana\_ne"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ね\n[ne]" />

<Button

android:id="@+id/hiragana\_no"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="の\n[no]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_ha"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="は\n[ha]" />

<Button

android:id="@+id/hiragana\_hi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ひ\n[ hi ]" />

<Button

android:id="@+id/hiragana\_fu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ふ\n[ fu ]" />

<Button

android:id="@+id/hiragana\_he"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="へ\n[he]" />

<Button

android:id="@+id/hiragana\_ho"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ほ\n[ho]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_ma"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ま\n[ma]" />

<Button

android:id="@+id/hiragana\_mi"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="み\n[mi]" />

<Button

android:id="@+id/hiragana\_mu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="む\n[mu]" />

<Button

android:id="@+id/hiragana\_me"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="め\n[me]" />

<Button

android:id="@+id/hiragana\_mo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="も\n[mo]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_ya"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="や\n[ ya ]" />

<Button

android:id="@+id/hiragana\_yu"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ゆ\n[yu]" />

<Button

android:id="@+id/hiragana\_yo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="よ\n[yo]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_ra"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ら\n[ ra ]" />

<Button

android:id="@+id/hiragana\_ri"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="り\n[ ri ]" />

<Button

android:id="@+id/hiragana\_ru"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="る\n[ ru ]" />

<Button

android:id="@+id/hiragana\_re"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="れ\n[ re ]" />

<Button

android:id="@+id/hiragana\_ro"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ろ\n[ ro ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:id="@+id/hiragana\_wa"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="わ\n[wa]" />

<Button

android:id="@+id/hiragana\_wo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:gravity="center\_horizontal"

android:text="を\n[wo]" />

<Button

android:id="@+id/hiragana\_n"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:backgroundTint="#007354"

android:text="ん\n[ n ]" />

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="horizontal">

<TextView

android:id="@+id/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="match\_parent"

android:text=""

android:padding="20dp"

android:textSize="18sp" />

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="match\_parent"

android:text=""

android:padding="20dp"

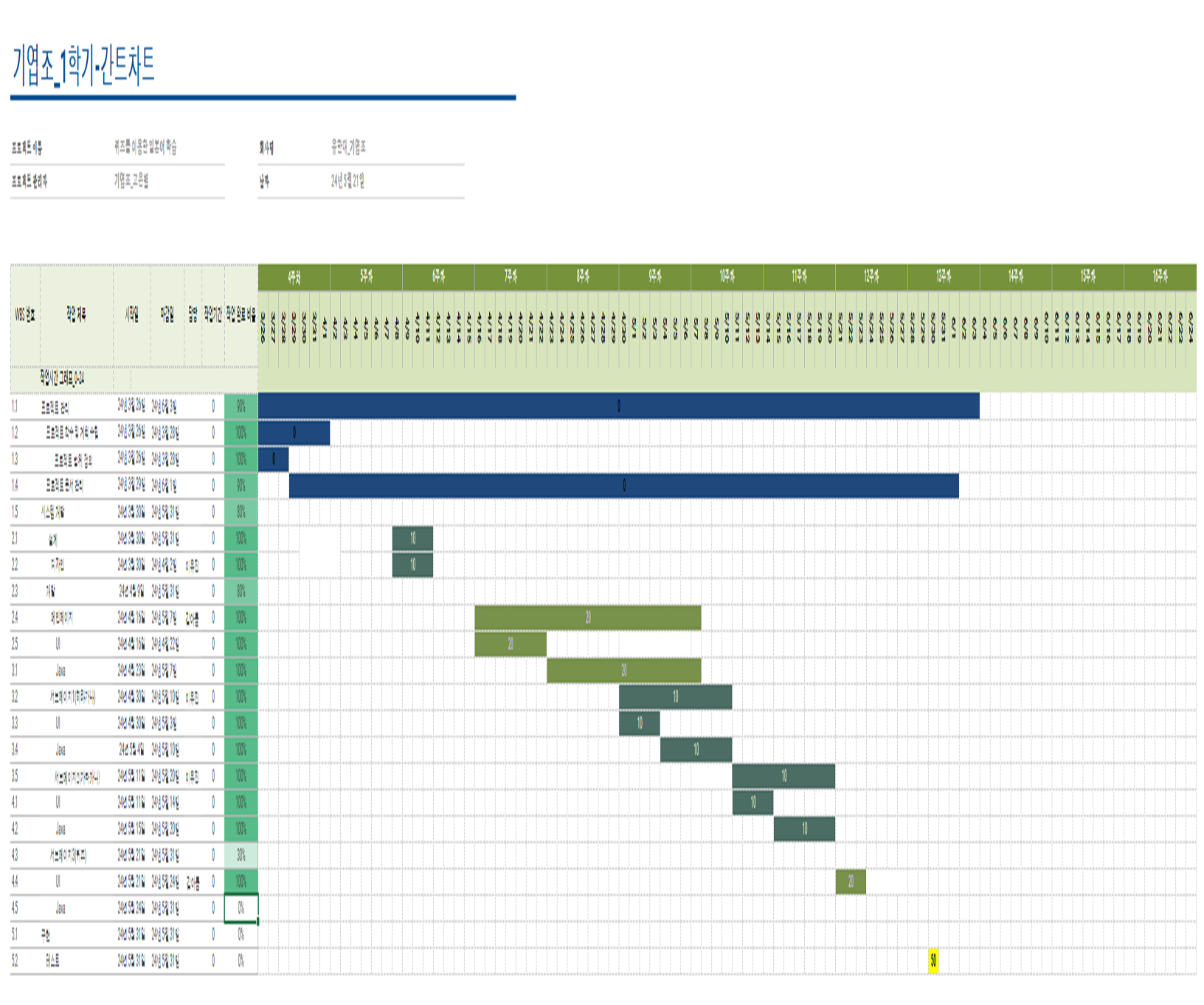
android:textSize="18sp" />

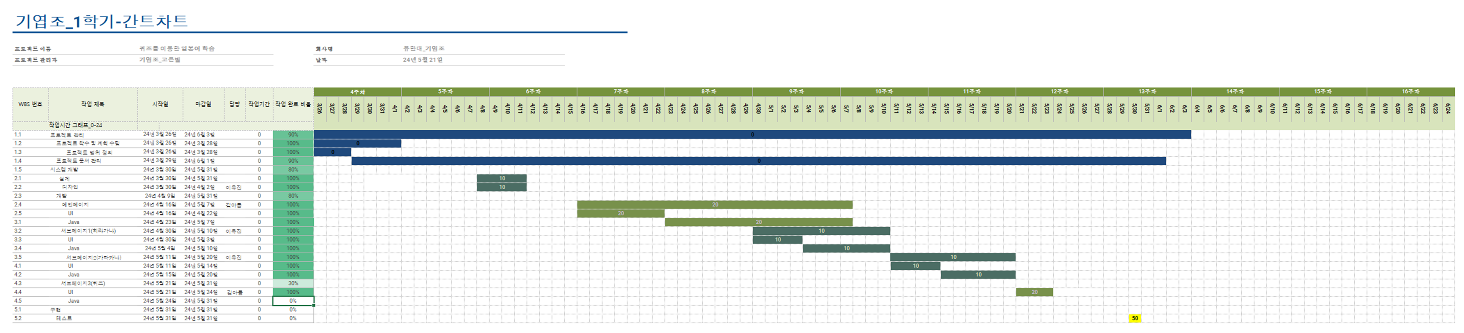
</LinearLayout>

</LinearLayout>

* 서브페이지 2 (hiragana.java)
* package kr.ac.yuhan.cs.andriodproject\_cute\_jo;
* import android.content.Intent;
* import android.os.Bundle;
* import android.view.View;
* import android.widget.Button;
* import android.widget.TextView;
* import androidx.annotation.Nullable;
* import androidx.appcompat.app.AppCompatActivity;
* public class hiragana extends AppCompatActivity {
* @Override
* protected void onCreate(@Nullable Bundle savedInstanceState) {
* super.onCreate(savedInstanceState);
* setContentView(R.layout.hiragana);
* TextView textView1 = findViewById(R.id.textView1);
* TextView textView2 = findViewById(R.id.textView2);
* Button hiragana\_a = findViewById(R.id.hiragana\_a);
* Button hiragana\_i = findViewById(R.id.hiragana\_i);
* Button hiragana\_u = findViewById(R.id.hiragana\_u);
* Button hiragana\_e = findViewById(R.id.hiragana\_e);
* Button hiragana\_o = findViewById(R.id.hiragana\_o);
* Button hiragana\_ka = findViewById(R.id.hiragana\_ka);
* Button hiragana\_ki = findViewById(R.id.hiragana\_ki);
* Button hiragana\_ku = findViewById(R.id.hiragana\_ku);
* Button hiragana\_ke = findViewById(R.id.hiragana\_ke);
* Button hiragana\_ko = findViewById(R.id.hiragana\_ko);
* Button hiragana\_sa = findViewById(R.id.hiragana\_sa);
* Button hiragana\_shi = findViewById(R.id.hiragana\_shi);
* Button hiragana\_su = findViewById(R.id.hiragana\_su);
* Button hiragana\_se = findViewById(R.id.hiragana\_se);
* Button hiragana\_so = findViewById(R.id.hiragana\_so);
* Button hiragana\_ta = findViewById(R.id.hiragana\_ta);
* Button hiragana\_chi = findViewById(R.id.hiragana\_chi);
* Button hiragana\_tsu = findViewById(R.id.hiragana\_tsu);
* Button hiragana\_te = findViewById(R.id.hiragana\_te);
* Button hiragana\_to = findViewById(R.id.hiragana\_to);
* Button hiragana\_na = findViewById(R.id.hiragana\_na);
* Button hiragana\_ni = findViewById(R.id.hiragana\_ni);
* Button hiragana\_nu = findViewById(R.id.hiragana\_nu);
* Button hiragana\_ne = findViewById(R.id.hiragana\_ne);
* Button hiragana\_no = findViewById(R.id.hiragana\_no);
* Button hiragana\_ha = findViewById(R.id.hiragana\_ha);
* Button hiragana\_hi = findViewById(R.id.hiragana\_hi);
* Button hiragana\_fu = findViewById(R.id.hiragana\_fu);
* Button hiragana\_he = findViewById(R.id.hiragana\_he);
* Button hiragana\_ho = findViewById(R.id.hiragana\_ho);
* Button hiragana\_ma = findViewById(R.id.hiragana\_ma);
* Button hiragana\_mi = findViewById(R.id.hiragana\_mi);
* Button hiragana\_mu = findViewById(R.id.hiragana\_mu);
* Button hiragana\_me = findViewById(R.id.hiragana\_me);
* Button hiragana\_mo = findViewById(R.id.hiragana\_mo);
* Button hiragana\_ya = findViewById(R.id.hiragana\_ya);
* Button hiragana\_yu = findViewById(R.id.hiragana\_yu);
* Button hiragana\_yo = findViewById(R.id.hiragana\_yo);
* Button hiragana\_ra = findViewById(R.id.hiragana\_ra);
* Button hiragana\_ri = findViewById(R.id.hiragana\_ri);
* Button hiragana\_ru = findViewById(R.id.hiragana\_ru);
* Button hiragana\_re = findViewById(R.id.hiragana\_re);
* Button hiragana\_ro = findViewById(R.id.hiragana\_ro);
* Button hiragana\_wa = findViewById(R.id.hiragana\_wa);
* Button hiragana\_wo = findViewById(R.id.hiragana\_wo);
* Button hiragana\_n = findViewById(R.id.hiragana\_n);
* // 히라가나 버튼 클릭 시
* Button back = (Button) findViewById(R.id.back);
* back.setOnClickListener(new View.OnClickListener(){
* @Override
* public void onClick(View view){
* Intent intent = new Intent(getApplicationContext(), MainActivity.class);
* startActivity(intent);
* }
* });
* hiragana\_a.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("あき [aki] 가을");
* textView2.setText("あせ [ase] 땀");
* }
* });
* hiragana\_i.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("いい [ii] 좋은");
* textView2.setText("いつ [itsu] 언제");
* }
* });
* hiragana\_u.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("うま [uma] 말");
* textView2.setText("うち [uchi] 집");
* }
* });
* hiragana\_e.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("なまえ [namae] 이름");
* textView2.setText("えき [eki] 역");
* }
* });
* hiragana\_o.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("しお [shio] 소금");
* textView2.setText("かお [kao] 얼굴");
* }
* });
* hiragana\_ka.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("かく [kaku] 쓰다");
* textView2.setText("あか [aka] 빨간");
* }
* });
* hiragana\_ki.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("せき [seki] 자리");
* textView2.setText("ゆき [yuki] 눈");
* }
* });
* hiragana\_ku.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("くち [kuchi] 입");
* textView2.setText("くろ [kuro] 검은색");
* }
* });
* hiragana\_ke.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("とけい [tokei] 시계");
* textView2.setText("いけ [ike] 연못");
* }
* });
* hiragana\_ko.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ねこ [neko] 고양이");
* textView2.setText("たこ [tako] 문어");
* }
* });
* hiragana\_sa.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("あさ [asa] 아침");
* textView2.setText("さる [saru] 원숭이");
* }
* });
* hiragana\_shi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ほし [hoshi] 별");
* textView2.setText("あし [ashi] 발");
* }
* });
* hiragana\_su.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("すし [sushi] 스시");
* textView2.setText("やすみ [yasumi] 휴일");
* }
* });
* hiragana\_se.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("せん [sen] 천");
* textView2.setText("あせ [ase] 땀");
* }
* });
* hiragana\_so.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("みそ [miso] 미소");
* textView2.setText("そら [sora] 하늘");
* }
* });
* hiragana\_ta.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("あした [ashita] 내일");
* textView2.setText("した [shita] 밑");
* }
* });
* hiragana\_chi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("いち [ichi] 일");
* textView2.setText("はち [hachi] 팔");
* }
* });
* hiragana\_tsu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("なつ [natsu] 여름");
* textView2.setText("くつ [kutsu] 신발");
* }
* });
* hiragana\_te.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("きって [kitte] 우표");
* textView2.setText("ちかてつ [chikatetsu] 지하철");
* }
* });
* hiragana\_to.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ひと [hito] 사람들");
* textView2.setText("もっと [motto] 더");
* }
* });
* hiragana\_na.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("なな [nana] 칠");
* textView2.setText("はな [hana] 꽃");
* }
* });
* hiragana\_ni.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("にく [niku] 고기");
* textView2.setText("なに [nani] 무엇");
* }
* });
* hiragana\_nu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("いぬ [inu] 개");
* textView2.setText("");
* }
* });
* hiragana\_ne.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ふね [fune] 선박");
* textView2.setText("おかね [okane] 돈");
* }
* });
* hiragana\_no.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("きのう [kinou] 어제");
* textView2.setText("ここのつ [kokonotsu] 아홉");
* }
* });
* hiragana\_ha.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("はこ [hako] 상자");
* textView2.setText("はる [haru] 봄");
* }
* });
* hiragana\_hi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ひる [hiru] 정오");
* textView2.setText("ひとつ [hitotsu] 하나");
* }
* });
* hiragana\_fu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ふく [fuku] 옷");
* textView2.setText("ふゆ [fuyu] 겨울");
* }
* });
* hiragana\_he.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("へた [heta] 잘 못하는");
* textView2.setText("");
* }
* });
* hiragana\_ho.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ほし [hoshi] 별");
* textView2.setText("ほしい [hoshii] 원하다");
* }
* });
* hiragana\_ma.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("くま [kuma] 곰");
* textView2.setText("まん [man] 만");
* }
* });
* hiragana\_mi.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("みみ [mimi] 귀");
* textView2.setText("みそ [miso] 미소");
* }
* });
* hiragana\_mu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("むし [mushi] 곤충");
* textView2.setText("");
* }
* });
* hiragana\_me.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ゆめ [yume] 꿈");
* textView2.setText("あめ [ame] 비");
* }
* });
* hiragana\_mo.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("もも [momo] 허벅지");
* textView2.setText("もっと [motto] 더");
* }
* });
* hiragana\_ya.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("やすみ [yasumi] 휴일");
* textView2.setText("");
* }
* });
* hiragana\_yu.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ゆめ [yume] 꿈");
* textView2.setText("ゆき [yuki] 눈");
* }
* });
* hiragana\_yo.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("よる [yoru] 밤");
* textView2.setText("よん [yon] 사");
* }
* });
* hiragana\_ra.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("あらう [arau] 씻다");
* textView2.setText("そら [sora] 하늘");
* }
* });
* hiragana\_ri.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("やきとり [yakitori] 야키토리");
* textView2.setText("");
* }
* });
* hiragana\_ru.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("わるい [warui] 나쁜");
* textView2.setText("よる [yoru] 밤");
* }
* });
* hiragana\_re.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("これ [kore] 이");
* textView2.setText("それ [sore] 저");
* }
* });
* hiragana\_ro.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("ろく [roku] 육");
* textView2.setText("しろ [shiro] 하얀색");
* }
* });
* hiragana\_wa.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("わたし [watashi] 나");
* textView2.setText("");
* }
* });
* hiragana\_wo.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("");
* textView2.setText("");
* }
* });
* hiragana\_n.setOnClickListener(new View.OnClickListener(){
* public void onClick(View view){
* textView1.setText("きっさてん [kissaten] 커피숍");
* textView2.setText("");
* }
* });
* }
* }

## 일정





## UI(디자인)

*직접 디자인해서 만들어낸 저희 마스코트 개구리를 내세우며 푸릇푸릇한 색감과 포근한 분위기를 이끌어냈습니다. 또한 수업내용을 담은 코딩은 사용하는 유저들이 번잡하다고 느끼지 않게 필요한 기능만 넣고, 깔끔하게 디자인 했습니다.*

## UX(기능정의)

*프로그래밍은 유저들의 참여도를 중심으로 만들었습니다. 학습의 중요한 것은 참여도와 반복성, 간단함이라고 여겨 버튼을 이용한 퀴즈 학습 '퀴즈를 이용한 일본어 학습'을 설계를 했습니다. 버튼을 이용한 4지선다형 퀴즈로 버튼 안에 단어를(스펠링, 단어 뜻) 넣어 알맞거나 틀리게 배치된 단어를 골라 답을 맞추면 바로 정답을 확인할 수 있고 퀴즈의 끝에 유저의 틀린 개수를 종합으로 계산하여 얼마나 틀렸는지 확인하며 일본어 단어 학습을 하게 하는 기능입니다*

# 결론

## 배포

## 실행결과화면

# 참고문헌

*Rational Unified Process(Rational Unified Process)*

애플리케이션 “오십음”