**Introduction**

Let’s imagine that SPORTY INC., one of the world’s major sports broadcasting companies, hired us for the following tasks.

SPORTY bought the broadcasting rights for the next English and Italian football leagues. The company is rolling out a huge promotional campaign to attract new customers in the UK and in Italy. Together with other traditional marketing channels, such as TV and social media ads, SPORTY has decided to experiment also with voice assistants to increase its brand awareness.

The company chose to focus initially on Alexa and create a custom Alexa Skill in the form of a quiz dedicated to football fans, to be published in the UK and Italian Alexa stores.

**Features of the Alexa Skill**

The Alexa Skill should be available in English (U.K.) and Italian.

The very first time that a user launches the Skill, he should be greeted and asked his first name. That name must be saved and stored so that the Skill will be able to greet the user by name in future sessions.

Upon set-up of this name, the user starts a new game. One game consists of 5 different football-related questions with 4 possible answers. Only one answer is correct. After giving his answer, the user is told whether the answer was correct or wrong. Then, the Skill proceeds to the next question.

The game ends when the user makes his third mistake OR when he answers the fifth and last question.

At that point, the Skills tells the user the score obtained (each correct answer = 1 point), and asks the user whether he would like to start a new game.

**Technical details**

Task: build an Alexa Skill with the features mentioned above. Please find below in the section “VUI design - examples” some detailed examples of the user flows we’d like you to implement.

You’ll need to set-up the interaction model of the Skill (intents, utterances and slots) and code the Skill’s backend.

Tools: [Jovo](https://www.jovo.tech/) is an open source framework that simplifies the creation and deployment of conversational applications. It can be useful, for example, to create an Alexa Skill and an equivalent Google Action from a shared (for the most part) codebase. Please use Jovo v4 for the creation of this Alexa Skill.

Programming language: feel free to choose between Javascript and Typescript. Please be aware that Jovo v4 is better documented for Typescript.

Useful links:

* [Jovo Docs](https://www.jovo.tech/docs)
* [Create a local server in Jovo](https://www.jovo.tech/marketplace/server-express)
* [Jovo plugin for local DB](https://www.jovo.tech/marketplace/db-filedb)
* [Dynamic Entities in Jovo](https://www.jovo.tech/docs/entities#dynamic-entities)
* [Dynamic Entities in Alexa](https://developer.amazon.com/en-US/docs/alexa/custom-skills/use-dynamic-entities-for-customized-interactions.html)
* [Handlers Routing in Jovo](https://www.jovo.tech/docs/handlers#redirect-to-components)
* [Output Types in Jovo](https://www.jovo.tech/docs/output#ways-to-return-output)

Tips: The interaction model of the Skill should end up being quite slim. Look into the concept of “Dynamic Entities” to better understand how to gather the user’s answers to the questions.

**Dialogues of the Skill and questions/answers of the games**

Dialogues (both in English and Italian) to be included in the Skill are in [this CSV file](https://drive.google.com/file/d/1HNbytTtrJCnEHxcKB3bsFqQ4TOy9t7qj/view?usp=sharing).

These two CSV files contain questions and answers to be randomly picked during the games, for the English and Italian versions respectively:

* [sporty-trivia-en-games.csv](https://drive.google.com/file/d/1xtVwC0H0nLiKPzQ4wCZmIoSFf2u61XZv/view?usp=sharing)
* [sporty-trivia-it-games.csv](https://drive.google.com/file/d/1uYxSPIcN3grIEY9CTHJ-DTOObrqivggx/view?usp=sharing)

Each game of the Skill must pick 5 random questions from the list. Option1 is always the correct answer.

**VUI design - examples**

1. First-time user, completes 5 questions
2. Recurrent user, makes 3 mistakes.

*U: User*

*A: Alexa*

### **1. First-time user, completes 5 questions:**

U: Alexa open Sporty Trivia.

A: Hi there, welcome to Sporty Trivia, the ultimate quiz for football fans. What’s your first name?

U: {firstName}.

A: {firstName}, correct?

***IF USER SAYS YES***

*U: Yes.*

***IF USER SAYS NO***

*U: No.*

*A: Sorry about that. What’s your first name?*

*U: {firstName}.*

*A: {firstName}, correct?*

*U: Yes.*

A: Let’s get started with a new game.

A: Question number 1. Which of these cities did not not host any game of the Euro 2020? 1, Paris. 2, Bilbao. 3, London. 4, Dublin.

U: Bilbao.

A: Wrong answer. The correct answer was: Paris.

A: Question number 2. Neymar is a Brazilian player. Which of these competitions did Neymar never win during his career? 1, Champions League. 2, Olympic games. 3, French League. 4, Copa America.

U: Copa America.

A: Correct answer.

A: Question number 3. Which of these managers is considered the father of Tiki Taka? 1, Mourinho. 2, Guardiola. 3, Klopp. 4, Ancelotti.

U: Guardiola.

A: Correct answer.

A: Question number 4. France won the 2018 World Cup played in Russia. Who did they beat in the final match? 1, Brazil. 2, Colombia. 3, Croatia. 4, Italy.

U: Brazil.

A: Wrong answer. The correct answer was: Croatia.

A: Question number 5. Which Argentinian city was Leo Messi born in? 1, Buenos Aires. 2, Rosario. 3, Cordoba. 4, Mendoza.

U: Rosario.

A: Correct answer.

A: The game has ended, {firstName}. You scored 3 points. Would you like to play another game?

***IF USER SAYS YES***

*U: Yes.*

*A: Let’s get started with a new game.*

*[...same user flow as above…]*

***IF USER SAYS NO***

*U: No.*

*A: Okay, come back soon. Goodbye.*

### **2. Recurring user, makes 3 mistakes.**

U: Alexa open Sporty Trivia.

A: Hi {firstName}, welcome back to Sporty Trivia, the ultimate quiz for football fans.

A: Let’s get started with a new game.

A: Question number 1. Which of these cities did not not host any game of the Euro 2020? 1, Paris. 2, Bilbao. 3, London. 4, Dublin.

U: Bilbao.

A: Wrong answer. The correct answer was: Paris.

A: Question number 2. Neymar is a Brazilian player. Which of these competitions did Neymar never win during his career? 1, Champions League. 2, Olympic games. 3, French League. 4, Copa America.

U: Copa America.

A: Correct answer.

A: Question number 3. Which of these managers is considered the father of Tiki Taka? 1, Mourinho. 2, Guardiola. 3, Klopp. 4, Ancelotti.

A: Wrong answer. The correct answer was: Guardiola.

A: Question number 4. France won the 2018 World Cup played in Russia. Who did they beat in the final match? 1, Brazil. 2, Colombia. 3, Croatia. 4, Italy.

U: Brazil.

A: Wrong answer. The correct answer was: Croatia.

A: You made three mistakes.

A: The game has ended, {firstName}. You scored 1 point. Would you like to play another game?

***IF USER SAYS YES***

*U: Yes.*

*A: Let’s get started with a new game.*

*[...same user flow as above…]*

***IF USER SAYS NO***

*U: No.*

*A: Okay, come back soon. Goodbye.*