SKY TECHNOLOGY
UNATTENDED PROGRAMMING TEST
REWARDS SERVICE

Scenario

A ground-breaking broadcaster has decided to reward its most loyal customers. A software engineering team, developing the customer account website, is working on the story below.

> ### Display customer's available rewards
>
> As a **customer**, if I am eligible for **rewards**, then I want to see which rewards are available based on my **channel subscriptions**.

The Account Management team has partnered with the Customer Status team that provides a service that checks the customer eligibility based on loyalty and billing status.

Instructions

You are required to provide an implementation of a *RewardsService*. You may use any programming language you like.

The service accepts as input a customer *account number* and a *portfolio* containing *channels subscriptions*. If the customer is eligible for rewards the RewardsService should return a list of all the *rewards* available according to the subscriptions on the portfolio.
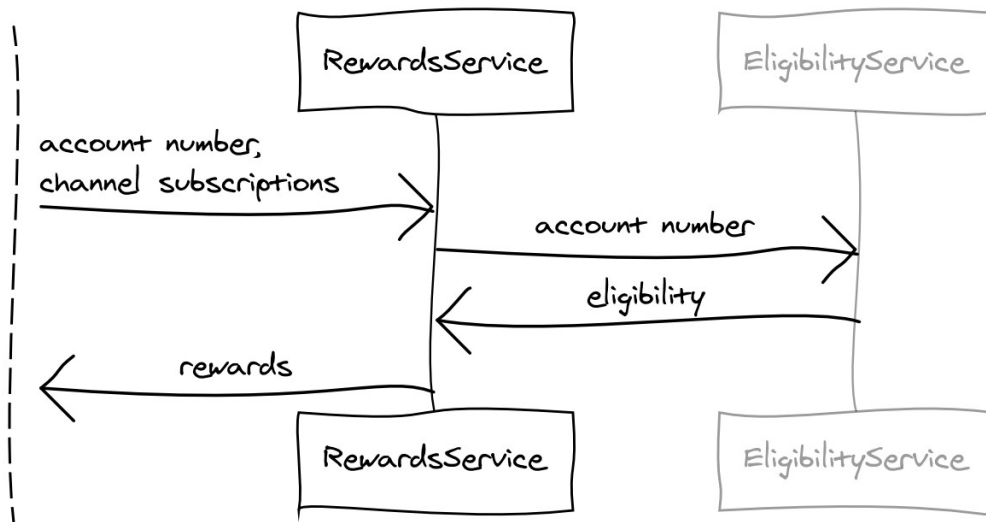
Acceptance Criteria

The following table describes the codes for the channel subscriptions and the associated rewards.

Channel	Reward
SPORTS	CHAMPIONS_LEAGUE_FINAL_TICKET
KIDS	N/A
MUSIC	KARAOKE_PRO_MICROPHONE
NEWS	N/A
MOVIES	PIRATES_OF_THE_CARIBBEAN_COLLECTION

The Customer Status team is currently developing the *EligibilityService* which accepts the *account number* as an input. You are required to provide a mock or stub of the *EligibilityService* interface.

This is a simple diagram of the interaction between the services:

The following table describes the EligibiityService output and the expected result:

EligibilityService output	Description	RewardsService result
CUSTOMER_ELIGIBLE	Customer is eligible	Return relevant rewards according to the customer's portfolio
CUSTOMER_INELIGIBLE	Customer is not eligible	Return no rewards
Technical failure exception	Service technical failure	Return no rewards
Invalid account number exception	The supplied account number is invalid	Return no rewards and notify the client that the account number is invalid

What we look at

We are especially interested in how you structure your code so that it's fully testable, easily extensible, complies with best object-oriented practices and is easy to modify / understand by others.

Please supply us with your source code and any tests you have written.