

*Task 1 – Describe REST APIs and GIT. Your task is to, in a couple of sentences, describe the usage of REST APIs in real-life scenarios based on the knowledge gained during lectures and your own readings. You will also describe the purpose of GIT repositories and their usage in projects. Note: It is important to use your own wording. Plagiarism (copying) will not be tolerated. Please use references if you copy from other sources.*

REST APIs are used widely for different purposes in communication between different systems. It has many advantages for example when connecting to the cloud or designing for different devices or platforms. An example of real life usage is how Instagram REST API can fetch data from the server and provide information about the resources - for example information about the Instagram users or images.

GIT is a version control system that makes it possible to track the changes that are made to a code. GIT repositories are used by many tools, such as GitHub to make it possible to share programming projects. It is an effective tool for sharing code or accessing earlier versions (history) in case something doesn't work. GIT repositories can also be used to merge different changes together.

*Task 2 – REST API in your project. Based on a website of your choosing, you are to describe how a REST API would help your “business”. Imagine that you have a collection of data on your website that you want to re-use in your mobile phone applications. What are the resources you would like to share, and how would you share them? Make a list of all resources you find required and justify why them. Do you have any duplicate resources, is your API easy to understand?*

Using REST API in Hungry Bubbles would be useful for a few different purposes. It would be easier to later develop mobile app or change environments. Use of REST would improve the scalability if our game would get hugely popular.

The data we would want to re-use in mobile application are the user information and what balls they have purchased as well as the gallery images and information for example about who added them. We might also want to share high scores of users. Required resources are balls we have in store and user information such as login credentials, purchases and scores. These are required to make the mobile-application function as the web version and for the users to be able to interact with the store.