## National University of Singapore School of Computing

## IS2102 Enterprise Systems Architecture and Design Assignment 1: Requirements Analysis

## InfluenceConnection (IC)

InfluenceConnection (http://www.influenceconnection.com) is an online platform that connects brands with social media influencers. InfluenceConnection aims to create a platform where brands can easily engage influencers for marketing efforts and help influencers better monetize their social media influence. The platform is used by three types of users: Brands, Influencers, and IC Staff. Generally, brands can post campaigns they hope to launch, influencers can participate in campaigns, and IC Staff can manage different aspects of the platform to ensure proper business operations.

Brands must sign up on the platform<sup>1</sup> to use the service. They can create campaign requests specifying details and goals<sup>2</sup>, and invite influencers to submit proposals. Brands can also approach influencers to market their products or services by encouraging influencers to submit proposals for their campaign requests. Specifically, brands can view a list of influencers filtered by various criteria such as social media channels (e.g. TikTok, YouTube, Instagram, etc), focus (live streaming, recorded videos, photography, etc), interest areas (travel, electronics, food, etc), and country. They can then view an influencer's profile and communicate with them by sending a message<sup>3</sup>.

Influencers also need to sign up on the platform to use the service. They can view a list of campaign requests submitted on the platform. Similar to brands, influencers can also view brand profiles. To simplify things, the platform differentiates between account types, and an influencer cannot view another influencer's profile. Influencers can submit proposals for campaign requests<sup>4</sup> in the form of a PDF document uploaded to the system. The influencer receives an email confirmation upon successful submission, and the brand receives an email notification about the submission.

Brands can view the list of received proposals on the "Received Proposals" page. If they accept a proposal, the influencer will be notified via email, and the proposal status will be updated from PENDING to ACCEPTED. Both the brand and influencer are prompted to rate the proposal<sup>5</sup> when they mark it as COMPLETED<sup>6</sup>. Brands can also delete campaign requests on the "My Campaign Requests" page.

For simplicity, we assume that brands and influencers pay a yearly subscription to remain active on the platform. Additionally, brands pay a fee for each successful match. We assume that payment processing and payment status updates are handled outside of this system. Compensation for influencers is settled privately between the brand and the influencer. However, if conflicts arise, the system provides a means

<sup>&</sup>lt;sup>1</sup> They can also be invited by an IC staff to join the platform, in which case the process of joining the platform will be a lot easier to encourage buy-in from these brands. In this case, an IC staff will create a brand in the platform and indicate the contact person of the brand. The brand can then accept an invite and be registered on the platform immediately.

<sup>&</sup>lt;sup>2</sup> You can assume that the details and goals are 2 free-text fields that brands can specify.

<sup>&</sup>lt;sup>3</sup> This works like a normal instant messaging app where a sender can view a list of conversations and send a message to a person/conversation. We will keep things simple by not allow users to delete messages and/or conversations.

<sup>&</sup>lt;sup>4</sup> Note that the system should not allow influencer to submit more than one proposal at any point in time for each campaign request. If they wish to make changes to their proposal, they can delete a proposal that they have submitted by visiting the "My Proposals" page and make a new submission.

<sup>&</sup>lt;sup>5</sup> Essentially when a brand rates the proposal, the brand rates the influencer and the work done. Conversely, when an influencer rates the proposal, he/she is rating the brand and the working relationship. Each rating consists of a rating score between 1 to 5 and a free-text rating comment field.

<sup>&</sup>lt;sup>6</sup> The system should capture two statuses – one by the brand and another by the influencer.

for the brands and/or influencers to escalate issues to IC staff by sending a message to the official IC Customer Support.

IC staff manage every aspect of the system. They can moderate the site by disabling brands and influencers from the "All Brands" and "All Influencers" pages respectively, and/or deleting campaign requests from the "All Campaign Requests" page.

Like other online portals, the system allows any user to perform standard user-related tasks such as login, logout, view my profile, edit my profile<sup>7</sup>, etc.

Note that not all the information presented above is needed to answer the questions for assignment 1. Some information is only needed in assignment 2.

1. Draw an activity diagram to illustrate the processes that take place for a brand to be onboard a platform to the completion of a campaign (including the giving of ratings). Use the swim lane approach. Make your own assumptions if the passage doesn't fully illustrate the process. State any assumptions as a small write-up separate from the diagram.

(3 marks)

2. Develop a use case diagram for the InfluenceConnection system, showing <u>all</u> the use cases and their associated actor/actors. You should ensure that the indicated use cases are valid use cases and there are no repeated use cases. Invalid use cases might lead to a penalty.

(4 marks)

3. Produce the fully-developed use case description for the following use case using the given template: "Submit a campaign proposal." Ensure the flow of events is detailed and logical. State any assumptions made. Indicate what database record(s) is/are created/updated/deleted.

(3 marks)

Use Case:	Submit a campaign proposal	
Triggering Event:		
Brief Description:		
Actors:		
Pre-conditions:		
Post-conditions:		
Flow of Events:	Actor	System
Exception Conditions:		

<sup>&</sup>lt;sup>7</sup> Influencers can edit their profile to showcase their portfolio. Specifically, the system provides a rich text editor where they can create a profile page using HTML.