

Acme Dancer 2.0

Acme Dancer, Inc. is requesting maintenance of their project. This document provides an informal description of their requirements; ask your lecturers for clarifications and details.

C-level requirements

Information requirements

1. Courses can be in two stages, namely: “ORGANISING” or “DELIVERING”. When a course is being organised, that means that the corresponding academy is searching for teachers who can deliver it; when it’s been delivered, that means that it is searching for students.
2. Dancers can register their curricula. A curriculum consists of a personal record, a number of style records, some custom records, and some endorser records.
3. A personal record consists of a full name, an optional email, an optional whatsapp number, and an optional URL to a LinkedIn profile. Note that either an email or a whatsapp number must be provided; they both mustn’t be blank.
4. A style record provides an indication on how many years a dancer has been dancing that style plus the reference to the style itself.
5. A custom record includes a title, a piece of text, and some optional links.
6. An endorser record consists of the full name of an endorser plus a contact means, which can be an email address, a phone number, a postal address, a PO Box... whatever a dancer can provide so that an academy can reach his or her corresponding endorser.

Functional requirements

7. An actor who is authenticated as a dancer must be able to:
 1. Manage his or her curricula; this includes listing, creating, editing, and deleting them.
 2. Apply for a course as a student or as a teacher. Applications as a teacher are accepted up to one week before the course starts; applications as students are accepted at any time before the course ends. Teacher applications require to attach a curriculum.
8. An actor who is authenticated as an academy must be able to:
 1. Manage their applications, which includes listing, accepting, and rejecting them.
9. An actor who is authenticated as an administrator must be able to:
 1. Display a dashboard with the following information:
 - The ratio of dancers who have registered a curriculum.
 - A listing of styles in decreasing number of courses in which they’re taught.
 - A listing of styles in decreasing number of dancers who can teach them.

Non-functional requirements

Intentionally blank.

B-level requirements

Information requirements

10. The actors of the system can exchange messages. Every actor has the following system folders, whose names cannot be modified at all: inbox, outbox, trashbox, and spambox. When an actor receives a message, it gets to the inbox unless the system flags it as spam, in which case it gets to the spambox. When he or she sends a message to another user, a copy is saved to the outbox. When an actor removes a message from a folder other than trashbox, it is moved to folder trashbox; when an actor removes a message from the trashbox folder, it is then removed from the system. The system flags a message as spam if it contains any of the keywords that an administrator has configured; by default, the keywords must include, but must not be limited to, "viagra", "cialis", "sex", and "love". Actors can create their custom folders and manage them. For every message, the system must keep track of the sender, the recipient, the moment when it was sent, the subject, the body, and its priority. Priorities are HIGH, NEUTRAL or LOW; no other values are expected.

Functional requirements

11. An actor who is authenticated must be able to:
 1. Exchange messages with other actors of the system.
 2. Manage his or her message folders, which includes creating, listing, modifying, and deleting them.
 3. Manage his or her messages, which includes writing and sending them, deleting them, moving them from one folder to another one, and the like.
12. An actor who is authenticated as an administrator must be able to:
 1. Display a dashboard with the following information:
 - The average number of folders per actor.
 - The average number of messages in the system folders.
 - The average number of spam messages per actor.

Non-functional requirements

Intentionally blank.

A-level requirements

Information requirements

13. Academies can register banners. For every banner, the system must store its URL.

Functional requirements

14. An actor who is authenticated as an academy must be able to:
 1. Manage their banners, which includes listing, creating, editing, or deleting them.
15. An actor who is authenticated as an administrator must be able to:
 1. Display a dashboard with the following information:
 - The average number of banners per academy.
 - The ratio of academies that have registered at least one banner.

Non-functional requirements

16. Whenever the welcome page is shown, the system must select a banner at random and display it. The banner must be linked to the corresponding academy.

A+-level requirements

Information requirements

Intentionally blank.

Functional requirements

Intentionally blank.

Non-functional requirements

17. The communications must be secured by using HTTPS where appropriate. A short report to explain how this A+ has been implemented is required.
18. The dashboard should show at least one statistical chart. It's strongly recommended that Chart.js be used, but other components are welcome. A short report to explain how this A+ has been implemented is required.