UML Complaint Management System

A PROJECT REPORT

Submitted by

Shaili Tarak Trivedi (02008856)
Dharti Patel (02007206)

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KENNEDY COLLEGE OF SCIENCES

UNIVERSITY OF MASSACHUSETTS LOWELL

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ACKNOWLEDGMENT

It gives me a great sense of pleasure to present the report of the Project work undertaken during study of Master of Science Degree in Computer Science. I owe special debt of gratitude to my Professor **Mr. Haim Levkowitz,** Acting Department Chair, Associate Professor of Kennedy College of Science at Miner School of Computer and Information Science, University of Massachusetts, Lowell, for his constant support and guidance throughout the course of my work. My deepest thank to my project guide **Ms. Neha Mishra**, the guide of the project for guiding and correcting me in every phase of my project .In my opinion, the submitted work has reached a level required for being accepted for examination. The results embodied in this project, to the best of my knowledge, haven't been submitted to any other university or institution.

Abstract

The main aim is to create a UML Complaint management system where university student, employees and faculty can register their complaints by creating new account or signing into existing account. After filing a complaint, admin will receive a notification with the complaint ID. The purpose of hiding complaint details is to make secure environment around university and make user comfortable to talk about incidences happing around them by keeping their identity secret. If the user is dissatisfied with the department's response or observes the same situation recurring, he or she may reactivate the original complaint and this time complaint will get notified to higher-ranking member of the hierarchy in respective department.

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Introduction

Shaili Trivedi
Dharti Patel

Chapter 1. Introduction

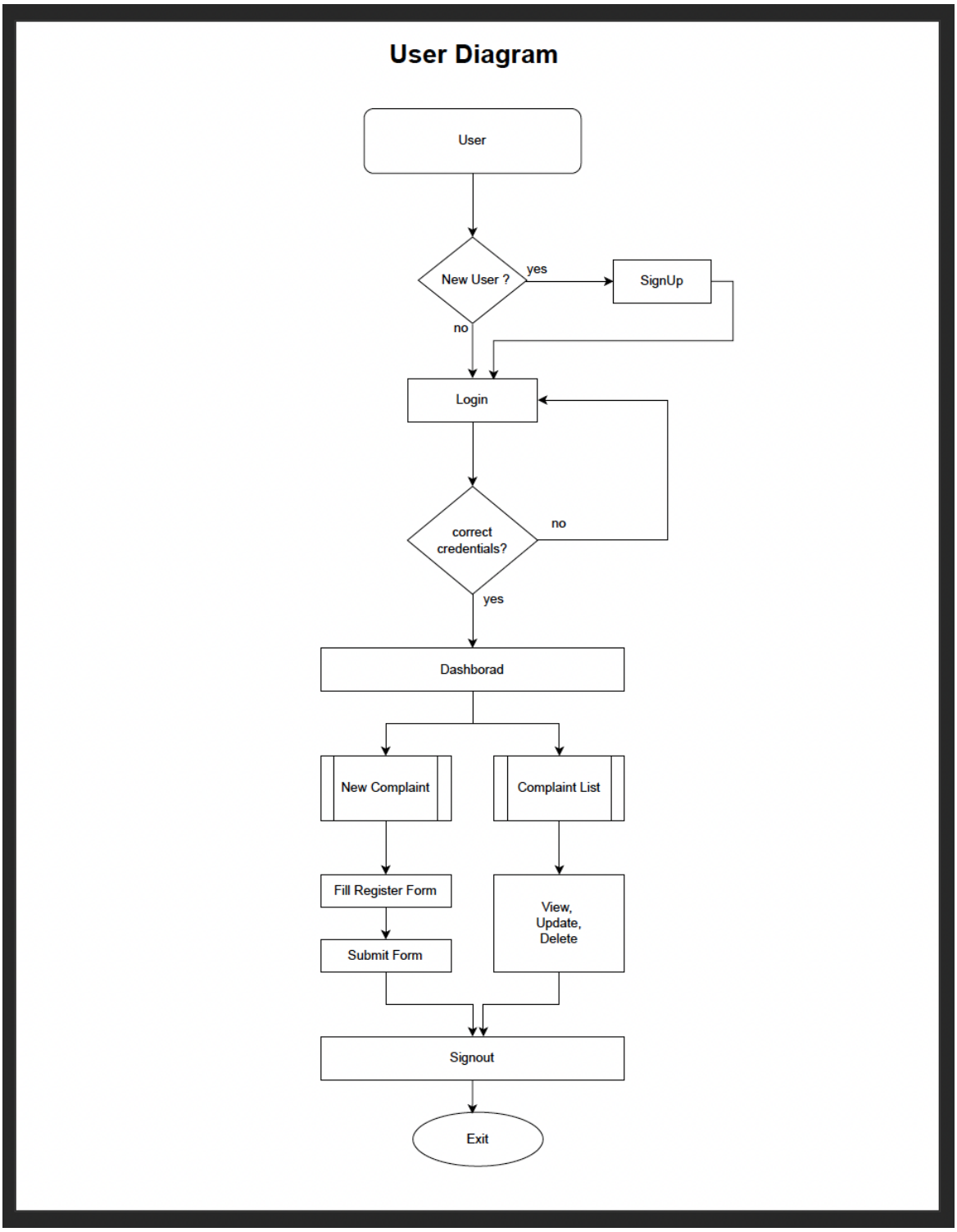
1.1 Abstract

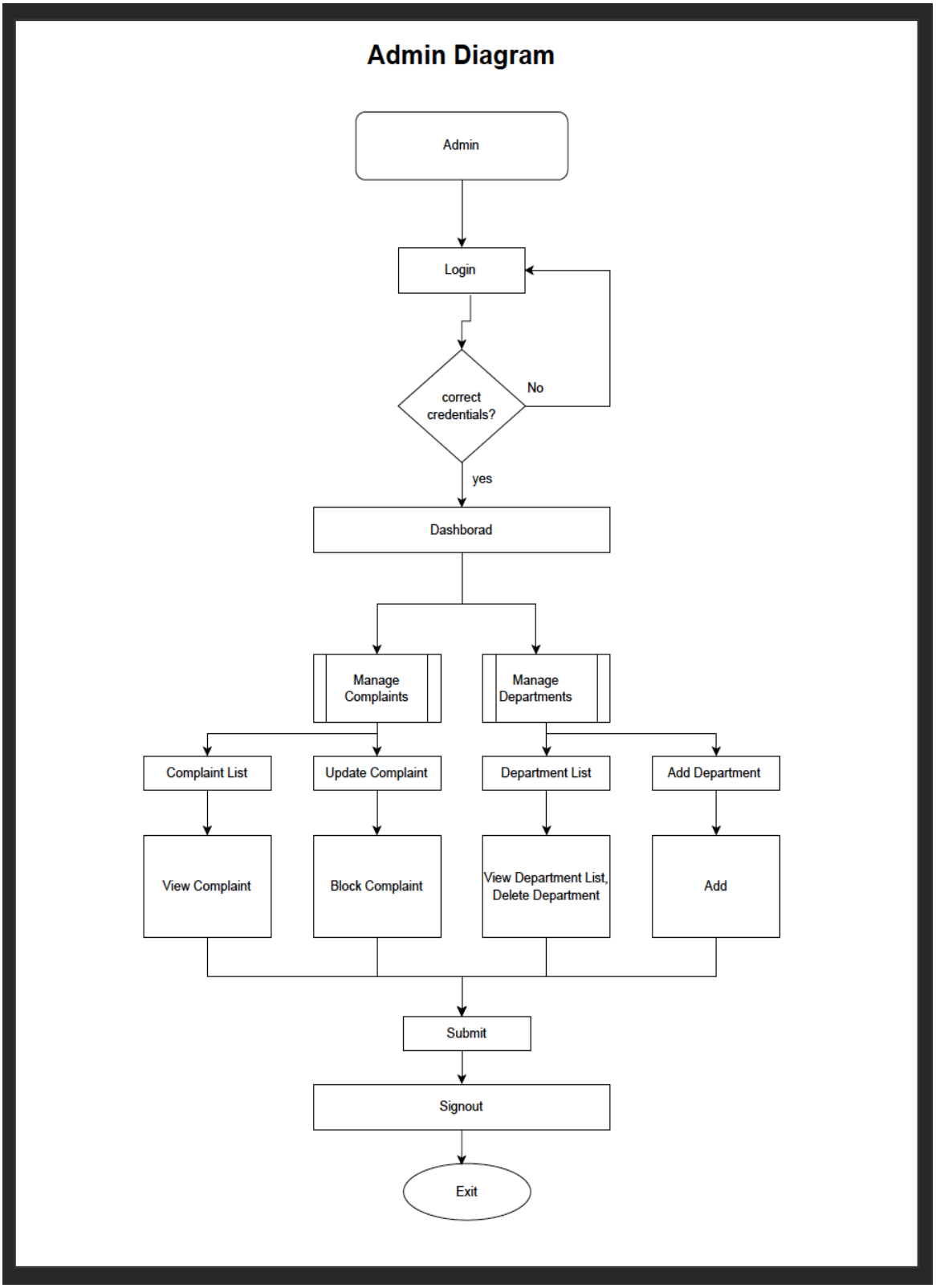
The main aim is to create a UML Complaint management system where university student, employees and faculty can register their complaints by creating new account or signing into existing account. After filing a complaint, admin will receive a notification with the complaint ID. The purpose of hiding complaint details is to make secure environment around university and make user comfortable to talk about incidences happing around them by keeping their identity secret. If the user is dissatisfied with the department's response or observes the same situation recurring, he or she may reactivate the original complaint and this time complaint will get notified to higher-ranking member of the hierarchy in respective department.

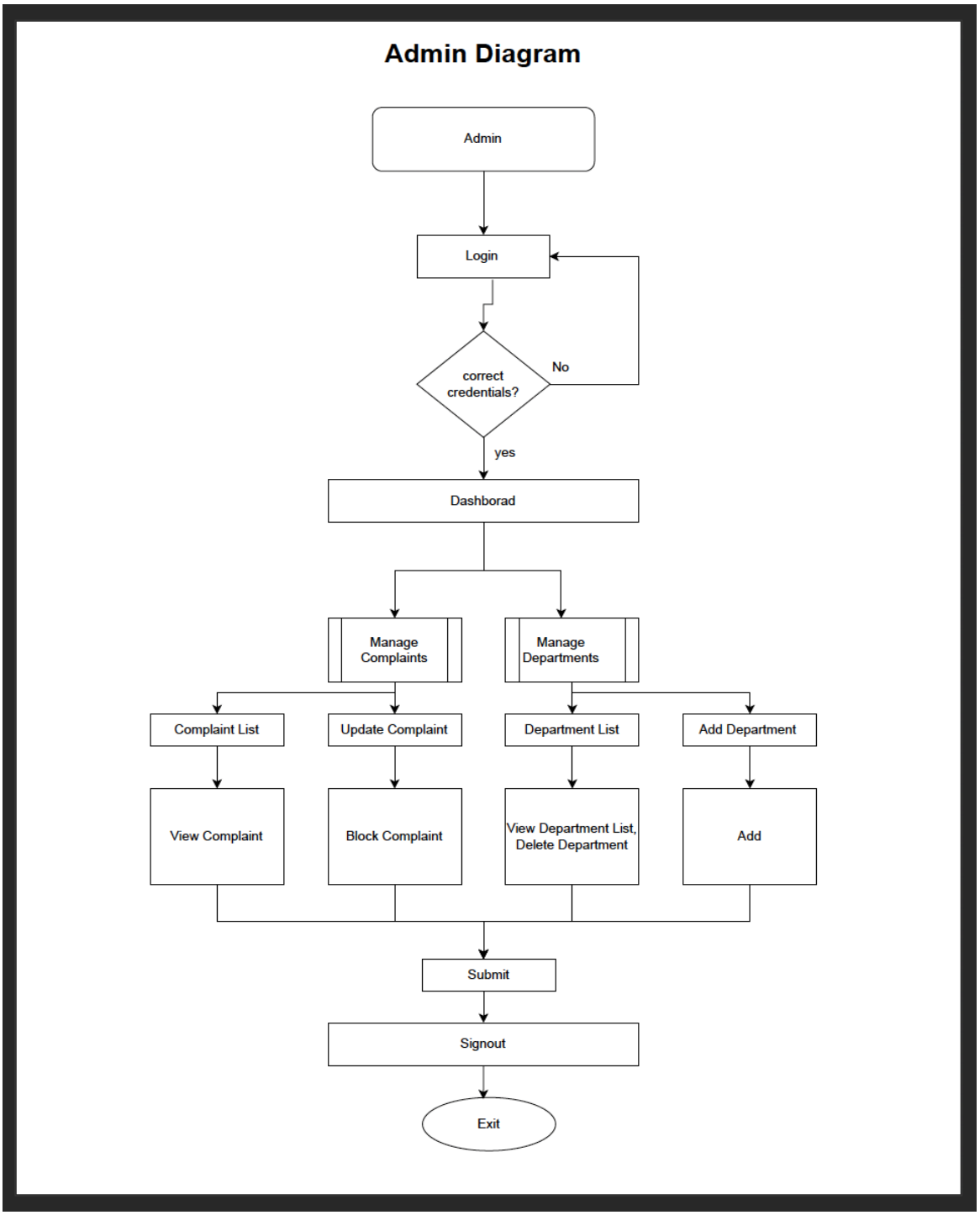
1.2 Problem Definition

Let's assume that someone reported a student who was misbehaving in the campus shuttle at night. Upon receiving of the complaint, the administrator will inform the Transportation Department about it here we are trying to keep the user’s detail secret, ensuring that he / she won't experience any further problems.

1.3 System Flow




Admin Diagram
Admin
Login
correct credentials?
No
yes
Dashborad
Manage Complaints
Manage Departments
Complaint List
Update Complaint
Department List
Add Department
View Complaint
Block Complaint
View Department List, Delete Department
Add
Submit
Signout
Exit


Admin Diagram
Admin
Login
correct credentials?
No
yes
Dashborad
Manage Complaints
Manage Departments
Complaint List
Update Complaint
Department List
Add Department
View Complaint
Block Complaint
View Department List, Delete Department
Add
Submit
Signout
Exit

1.4 How does the system work?

We have Welcome Page for the UML Complaint Management System web application, from there User, Department and Admin can get into the system. For the User side , User can register themselves and then login to system register the complaint and can also view previously registered complaint.

1.5 Work done by me

Firstly, I gathered the functionalities required for the system to reach it's aim. Considering the functionalities , I designed the page for the Home(Welcome), User , Department and Admin portal. Meanwhile, I gathered information that which technologies are better for the Front-end and what libraries will be required to develop the model. By discussing the project model with the team member, we divided the work equally to both of us. Mainly I created the Front-end of the UML Complaint Management System from scratch. For the Front-end of the system, I have used technologies such as HTML , CSS , JavaScript , Bootstrap and along with that used different Libraries such as min.js, bootstrap's library, jQuery, perfect scrollbar and many more. For the system I have developed Home Page, User Page which contains SignUp, Login, Dashboard Page, Complaint List Page, and New Complaint Page , for Admin model it contains Login Page, Dashboard Page, Complaint List Page, Department List Page, Update Complaint Page, and for Department Model it contains Login Page, Dashboard Page, Complaint List, Resolve Complaints and Show Resolve Complaint List. While creating the above pages I have used JavaScript and CSS libraries such as min.js, bootstrap and more. The greatest challenge for me was to use the libraries for the first time in HTML page and trouble shoot the error while coding. But the output of the effort was at the greatest level. I achieved the satisfactory at the end.

I have also worked on the Back end of the project. I learned new technology that is JSP (Jakarta Server Pages) which is used to create dynamic web application but using the Java Programming Language. As, my team partner was majorly working on the backend of the project using Java and Spring Boot, it was necessary for me to learn and implement JSP to the project. Once I created all the HTML Pages for the system, it was easy for me to convert those pages into the JSP pages according to the requirements. While converting the pages to JSP Pages , the header and footer portion of the web application were commonly separated from the other web pages and rest individual functioning pages were developed in JSP language. The debugging and error solving was one of the challenges during this phase.
Once , I achieved satisfactory results of the JSP Pages , I started working on the Validation of the User's Login Page. While user registers themselves ,data entry such as Firstname, LastName, email id , Phone Number (not Required) , password and confirm password were needed. Hence, during the data entries the validation of the values is successfully implemented using the JavaScript.

The testing and debugging the system till the end was done together by both team member.

1.6 Division of work

Shaili Trivedi :

The work done by me was mainly towards the systems Front-end of the system using technologies such as HTML, CSS , JavaScript, and Bootstrap. Also , for the Backend of the web application, I have worked on the JSP Pages. The testing and debugging of the project were simultaneously done by both of the team members.

Dharti Patel :

The work done by my team was mainly on the systems Back-end of the system using technologies such as Java and Spring Boot .The testing of the project was also performed by my team member parallelly.

Both of use worked equally during the project

Chapter : 2

Requirement Analysis

Chapter 2. Requirement Analysis

2.1 Tools and Technology Usedl

- Software Tools and Languages
    1. Eclipse
    2. Sublime
    3. MySQL
    4. Java
    5. CSS
    6. Bootstrap
    7. JavaScript
    8. HTML
    9. Spring





2.2 How to launch/build/install the project

To launch the project, you will need **Java SE 11**
Check your system has java install or not by writing command java-version

- Use Eclipse IDE to run the Spring Boot

You need any IDE tool for spring.

- You need MySQL Database
- In Eclipse go to file → import → existing maven project→ next → Browse Folder path → Finish

We have pom.xml where all the dependencies are specified so all the required JAR files will be installed by the IDE.

- Check the application. Properties file under src → main → resources where you need to provide the username and password of your MySQL workbench.

2.3 How to run project

Finally, Go to com→example→demo, where there is DemoApplication.java. On the java file, run this application on Tomcat Server.

The web application will be started on 8080 port, so just open the browser , and hit localhost:8080

Admin does not have sign up option so here default user email and password for Login Process.

ADMIN Module(http: localhost/admin)

- User email : -admin123@gmail.com
- Password : - Admin@123
- Note(above are the default username and password)

Chapter : 3

Snapshot

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Chapter 3. Snapshot

Chapter : 4
What Project does

Chapter 7. Project Does

Project Does not :

Following are the limitation of the project:

1.) The system at current point cannot accept other external sources such as Image, PDF , Audio , Video etc during registration of the complaint.

2.) The other limitation to our project is that, when user tries to login to the Dashboard of the system with the wrong credentials, the system does not show any pop-up message. It just redirects to login page again.

3.) The third drawback of the system that , the front-end of the development page has different data-time format while creating the complaint. The back-end had the different format of date-time, hence could not compile both of the date-time format into same format. We tried at our best , but could not achieve the solution for the problem

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Chapter : 5

Future Enhancement

Chapter 7. Future Enhancement

Chapter : 4
System Design

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Chapter 8. Conclusion

Chapter : 6
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