Students & Companies

RASD & DD

- Apollonio Marco (10764083)
- Bossi Giacomo (10766073)
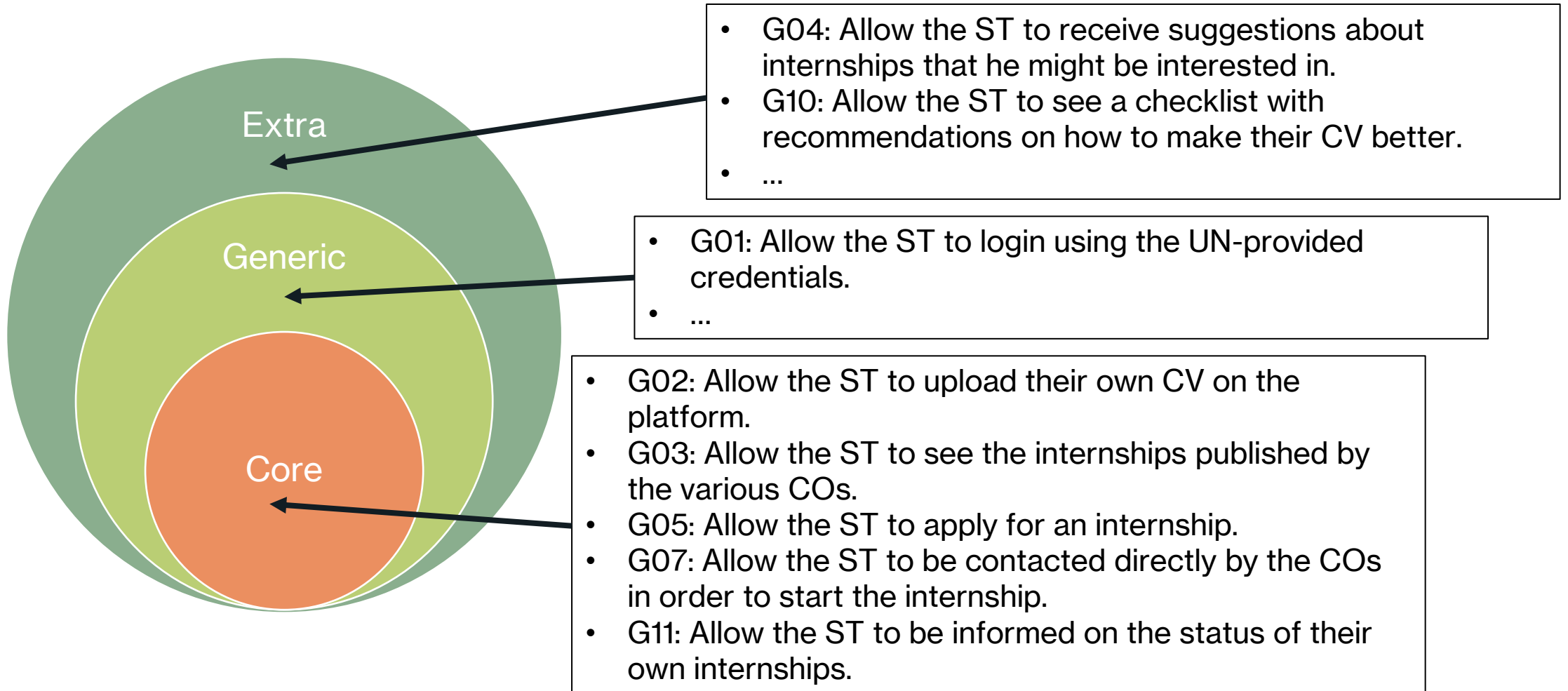- Chiroli Lorenzo (10797603)

RASD

- Goals and Requirements

- S&C user types: 👩‍🏫 Students (ST), 🏭 Companies (CO), 🎓 Universities (UN).

- There is a symmetry between the goals "seen" from a student perspective and from the company perspective (S&C is a job-seeking application: if a student wants to find a job, a company needs to publish it before…).
  – G03: "Allow the ST to see the internship published by the various COs";
  – G14: "Allow the CO to publish an internship announcement".

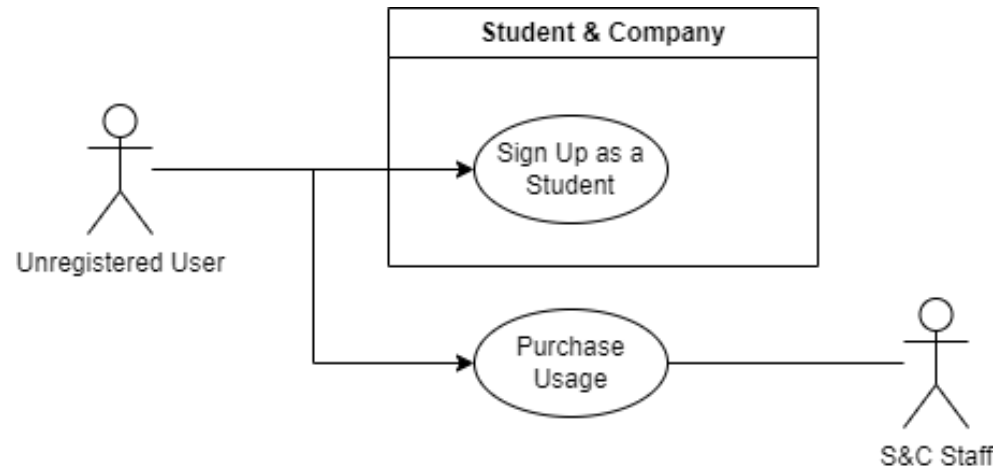- UN acts as a moderator of the platform.

- Goals and Requirements

- Two different types of requirements:
  - Functional requirements (e.g., What business processes must be supported?) almost a 1:1 mapping with the goals!
    - G02: Allow the ST to upload their own CV on the platform.
    - R08: S&C enables STs to upload and store their CVs on the platform.
  - Performance requirements (e.g., What are the expected load and throughput requirements?):
    - 💥 Latency Requirements: l ≤ 300 ms (excluding network).
    - 🪨 Architecture Sizing: 1.9 million university students in 2024. 20% market share → 380K targeted. Should be able to accommodate 500K users in total.

- Goals and Requirements

- G04: Allow the ST to receive suggestions about internships that he might be interested in.
- G10: Allow the ST to see a checklist with recommendations on how to make their CV better.
- ...

- G01: Allow the ST to login using the UN-provided credentials.
- ...

- G02: Allow the ST to upload their own CV on the platform.
- G03: Allow the ST to see the internships published by the various COs.
- G05: Allow the ST to apply for an internship.
- G07: Allow the ST to be contacted directly by the COs in order to start the internship.
- G11: Allow the ST to be informed on the status of their own internships.

- **Use Cases – Unregistered User**

An Unregistered User can only do two kinds of actions.

This kind of client is the only one that requires direct contact with the platform staff
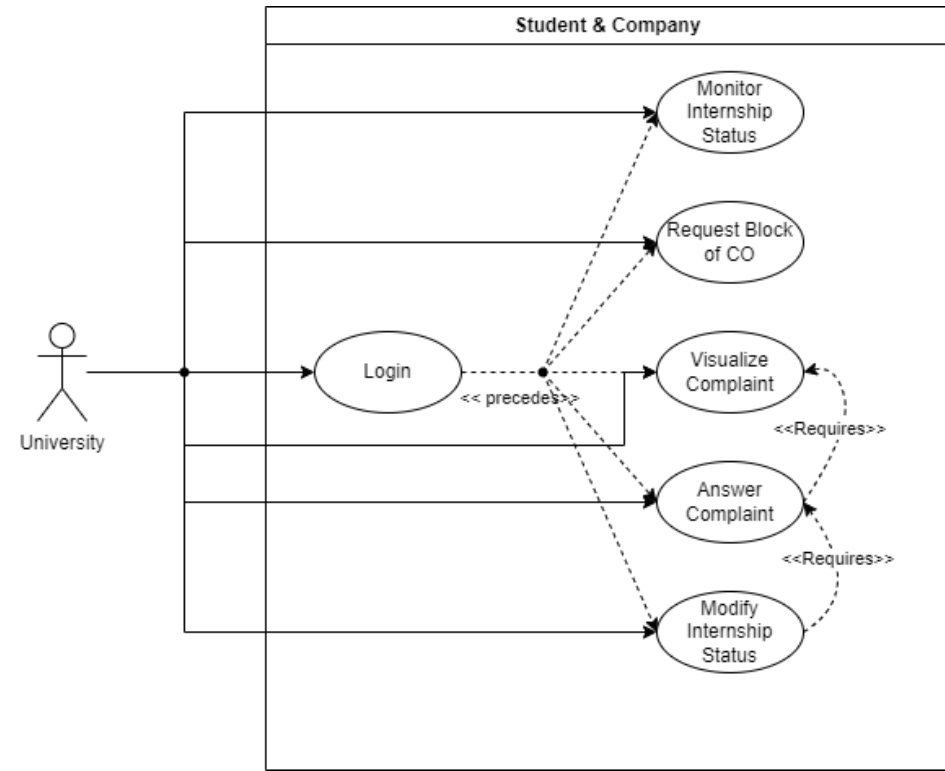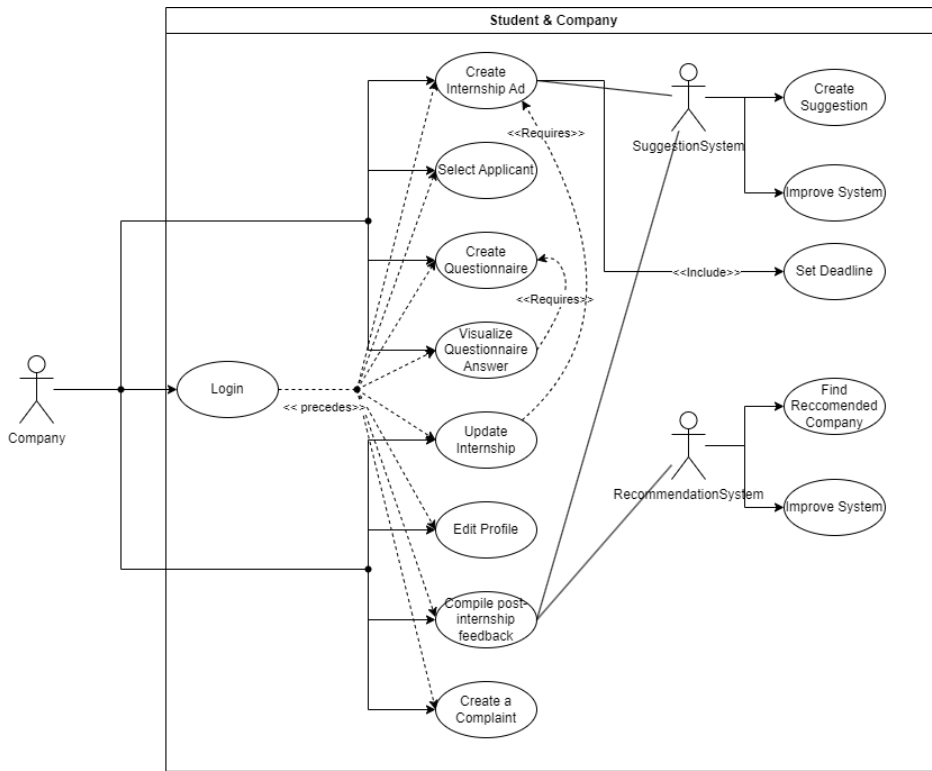
- **Use Cases – Student**

All registered User as their first action need to execute the login, by SSO if they are part of a associated University or by credential if they are a Company

Here are shown the actions that can be done by a Student after his login
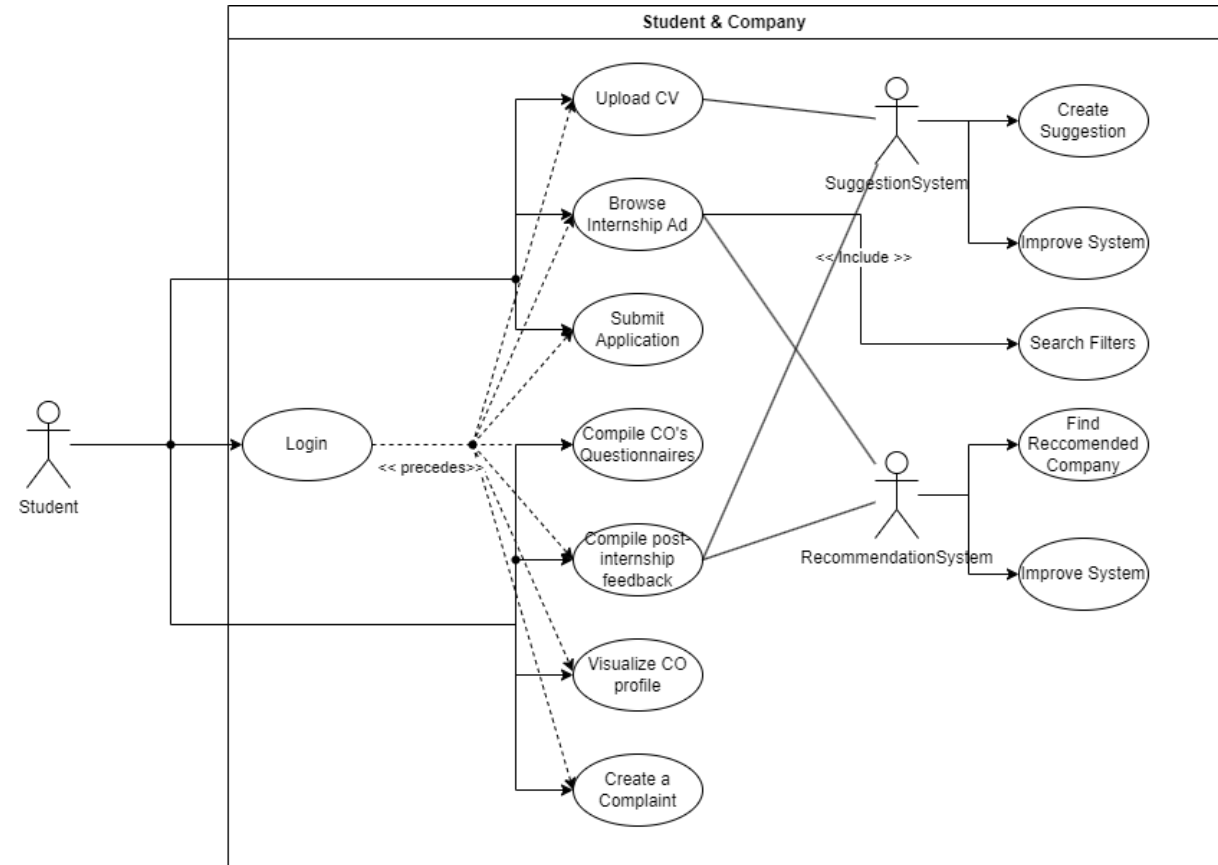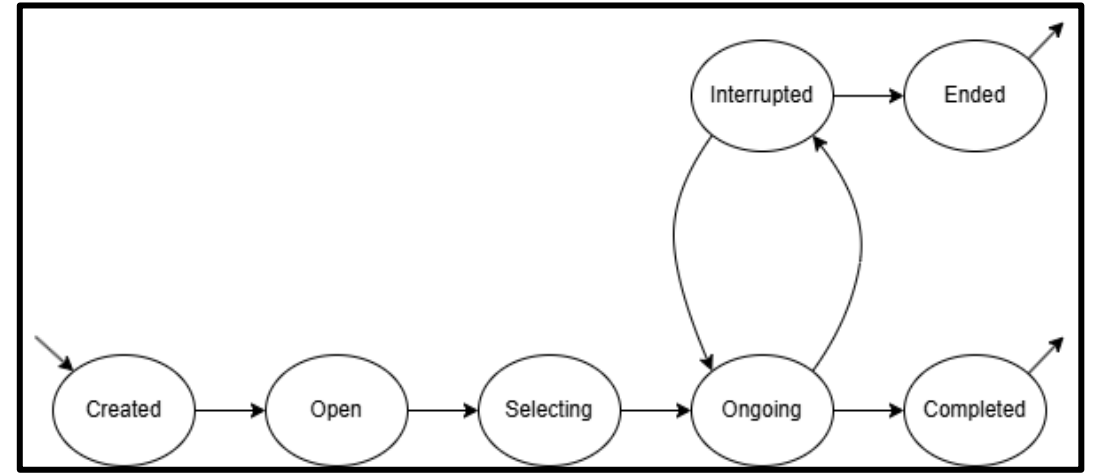
Use Cases – Company and University

- Alloy (approach)

Formal analysis allows us to systematically create instances, evaluate, verify, and validate the correctness, and behavior of the application. This ensures that it adheres to the previously defined specifications.
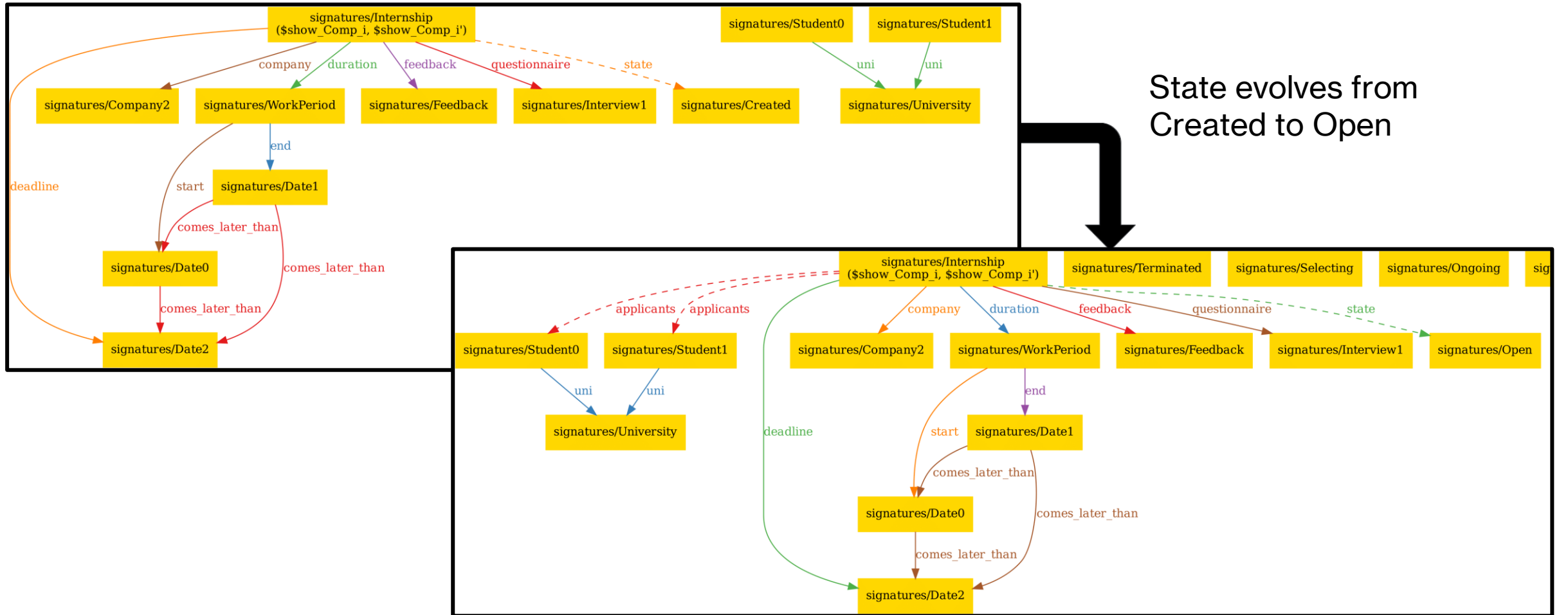
Key Points in the Analysis Approach:

- Focus on dynamic components

- Model creation

- Abstraction

Internship state model used as reference

- Alloy (results)

State evolves from Created to Open

DD

- **Component Diagram**

The component diagram highlights the software architecture of the system, focusing on the central role of the S&C Server.

The server orchestrates core functionalities and interacting with the services that are in different hardware such as the DBMS and the Mail Server.

This approach prioritizes scalability, modularity, and adaptability to user requirements, enabling seamless integration with secondary services while maintaining system coherence.

- Component Diagram
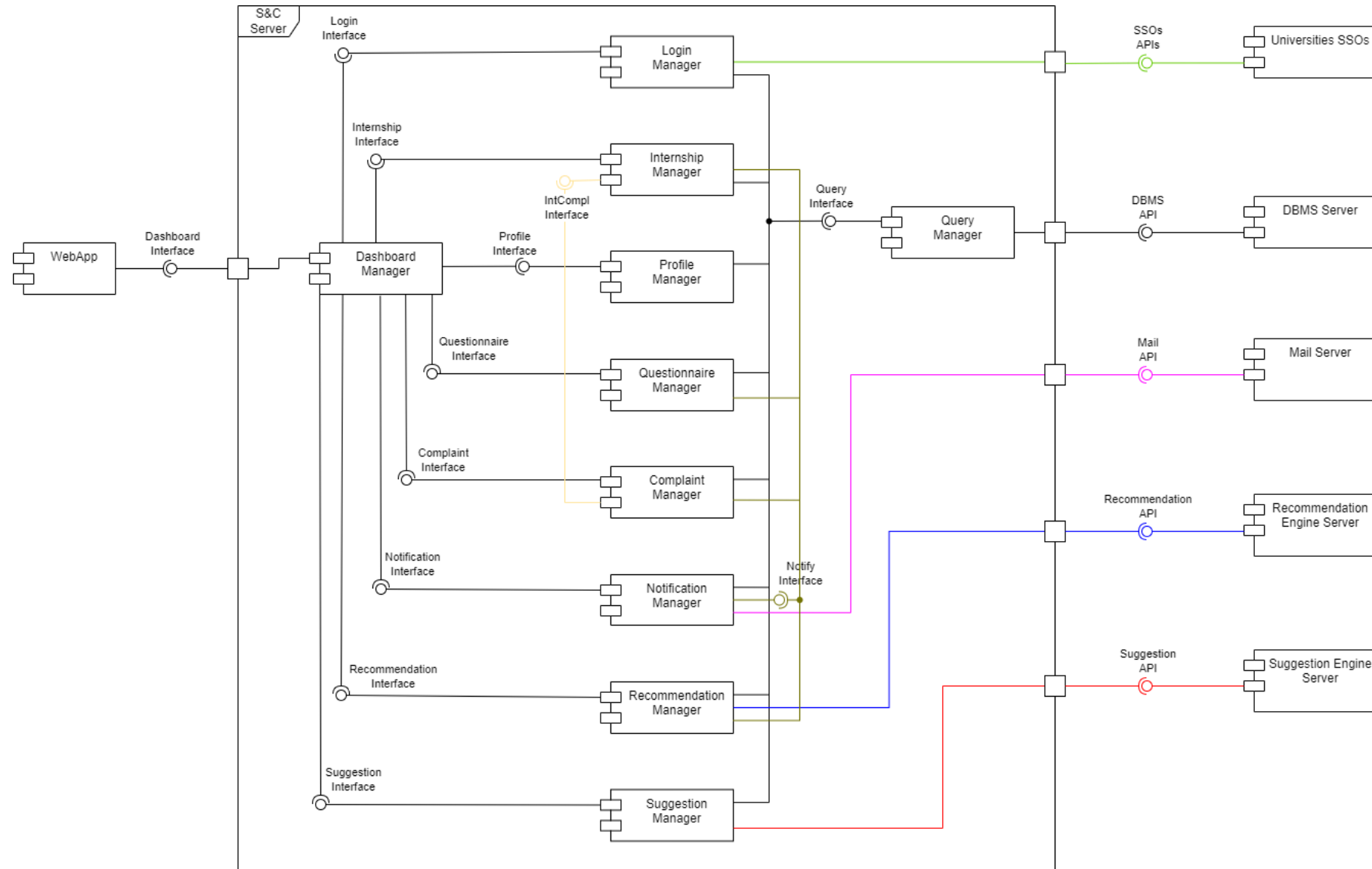
- Component Diagram – External Interactions

- Dashboard Manager is the only component that exposes an interface to the outside
- Five components use interfaces coming from other services, all this services are internal to the company except the Universities SSOs.
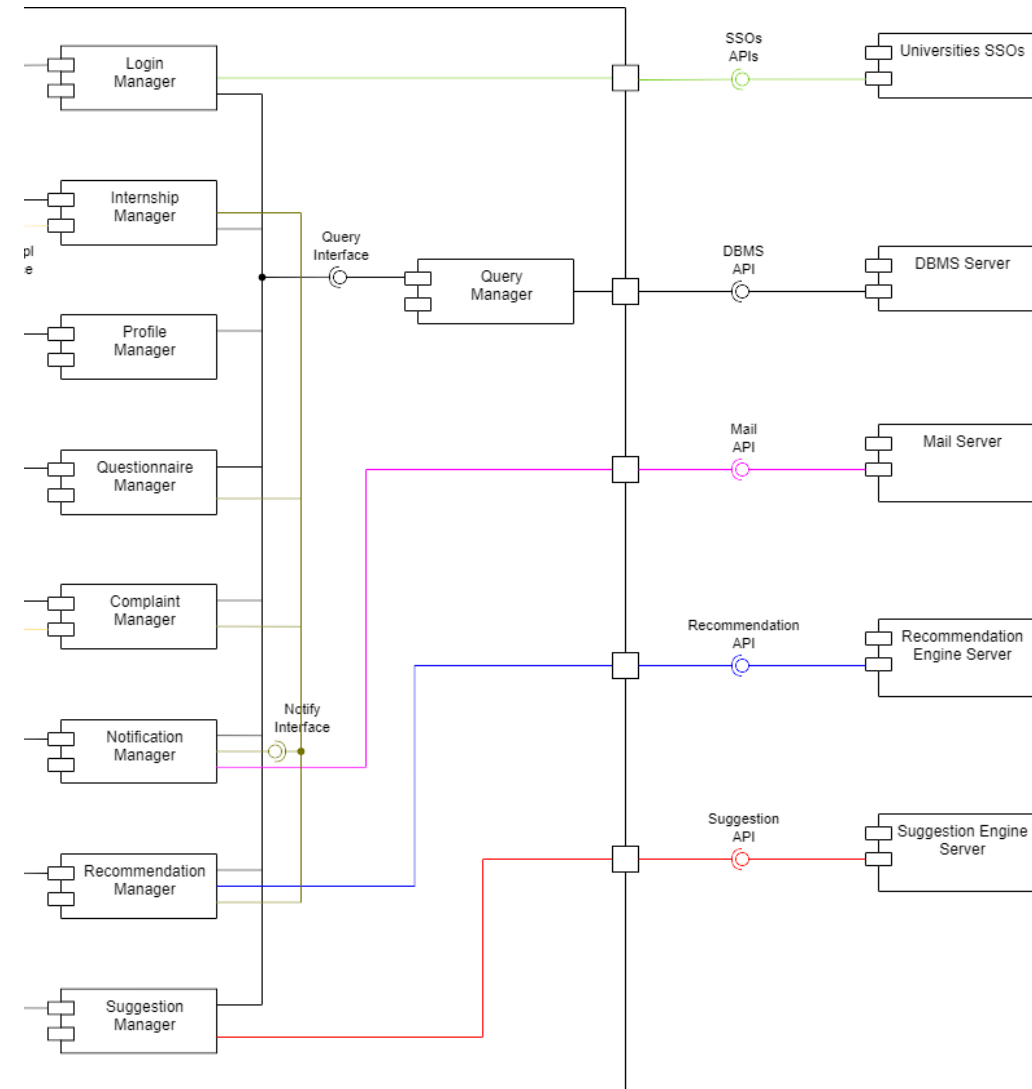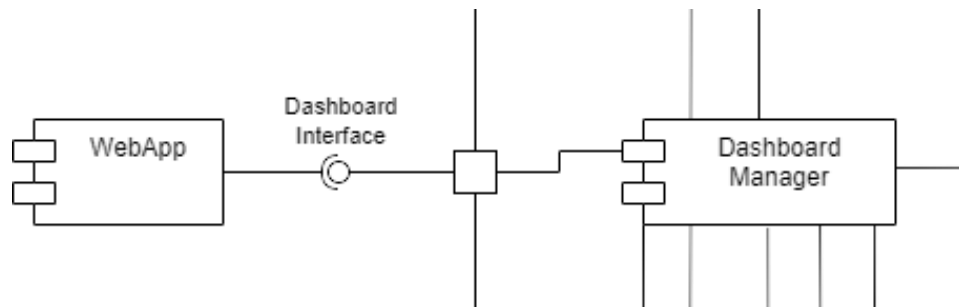
- Component Diagram – Internal Interactions

- Query Manager has an interface that is used by all the components that execute some actions.

- All this component expose an interface to the Dashboard Manager that will use them based on the action requested by the user.
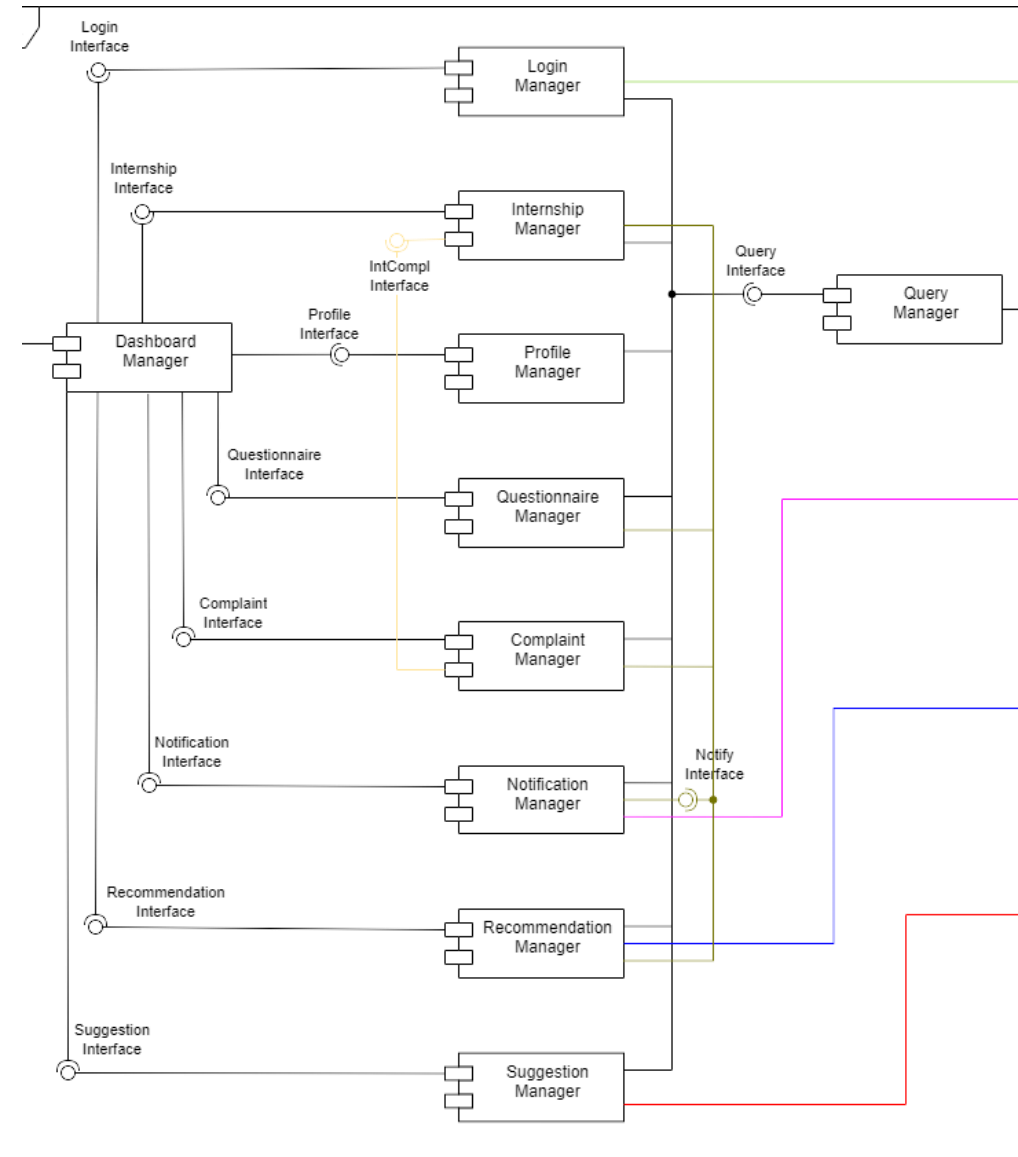
- Deployment

- 🔃 S&C is a 3-tier (Data-Presentation-Application tiers) application that leverages the MVC (Model-View-Controller) design pattern.

- ⚠️ The application tier is not fully monolithic!
  - ♻️ Some subservices are already available from the open-source community.
  - 🪜 It allows for easier horizontal scaling.

- Deployment

- User Flow

Access S&C → **Login** → **Homepage**

ST finds a interesting job posting. → **Internship Details**

ST wants to see/edit its own CV. → **"My Profile"**

ST wants to see all the internships it is/was involved with. → **"My Internships"**

View details of a internship...

Parts of the selection process handled by S&C → **Profiling Questionnaire**

Internship Feedback Survey

Issue Reporting Form

Search
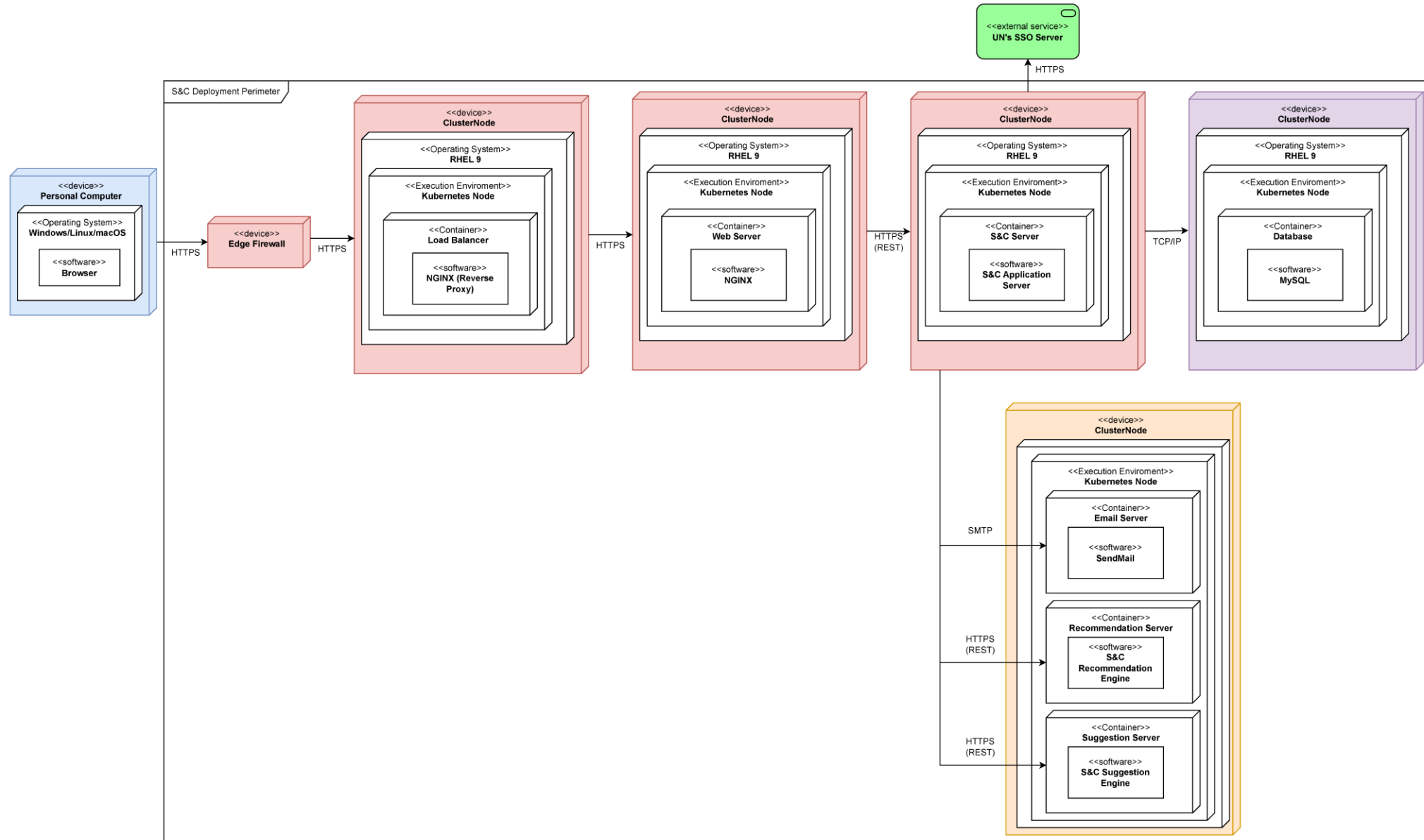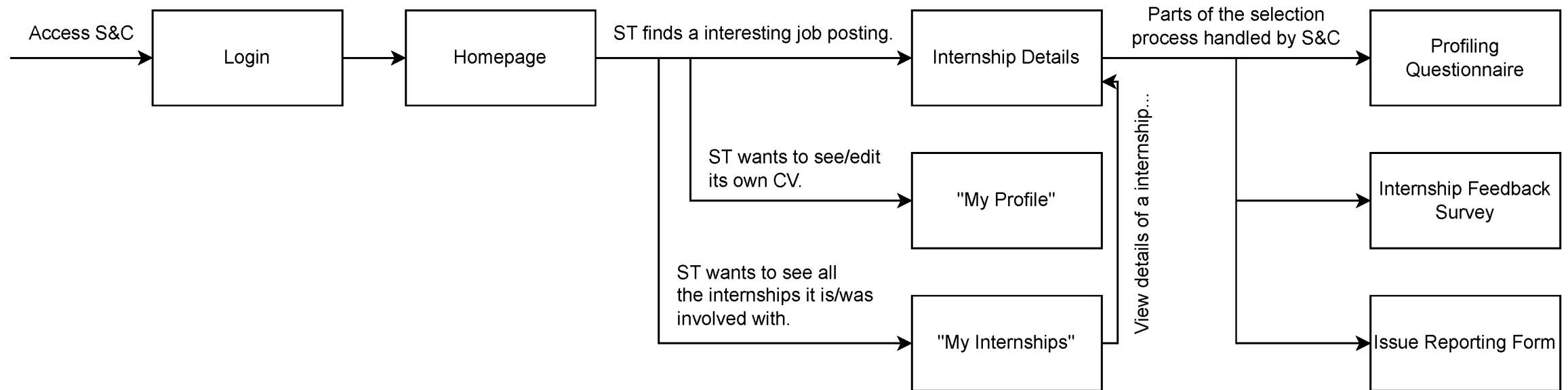
Sorting criteria:

✓ Recommended by S&C

Alphabetical (Company)

Alphabetical (Job Title)

Posting date

R&D Testing & Lab Specialist - ABB S.p.A

You will join the Laboratory team responsible for testing and certification of ABB low volt-age products in the field of DIN-Rail, Wiring Accessories and Building Automation. In particular, you will mainly focus on ...

Recommended for you!

Finance Transformation FSI - Deloitte Consulting S.r.l.

The Junior resource will be inserted into a work team, supporting senior colleagues and dealing with: - Proactively interpreting customer needs, identifying coherent methodologies and approaches ...

Recommended for you!

Data Scientist - Deix s.r.l.

We are looking for a motivated, ambitious Data Scientist available to: - design and develop advanced mathematical, statistical and machine learning algorithms and models - help our customers analyze ...

Recommended for you!

Field Engineer Junior - Keyence Italia S.p.A.

With this job you will be able to: 1. Learn about the most advanced automation techniques and solutions directly from the Japanese parent company; 2. Be continuously updated on products ...

Recommended for you!

About the company

Who are we?

IKEA is a globally recognized home furnishing retailer, committed to creating a better everyday life for the many people. Founded in Sweden in 1943, IKEA offers well-designed, functional, and affordable home products, produced with a focus on sustainability and environmental responsibility. With operations in over 50 countries and a strong culture rooted in innovation, diversity, and collaboration, IKEA strives to make a positive impact on its customers, employees, and the planet. At the heart of IKEA's success is its vision to inspire and enable people to create homes they love.

What is our company culture?

- IKEA's work culture is built on collaboration, empowerment, and a strong sense of belonging. Employees are encouraged to take initiative, think creatively, and continuously learn, fostering a dynamic and supportive environment. The company emphasizes work-life balance, offering flexible schedules and prioritizing employee well-being.
- IKEA champions teamwork and open communication, promoting an egalitarian approach where every voice matters, regardless of role or seniority. Leaders focus on coaching and development, helping individuals grow within the organization. With a strong commitment to diversity, inclusion, and sustainability, IKEA's work culture inspires employees to contribute meaningfully while staying true to the company's core values of simplicity, humility, and togetherness.

Stage Digital & Technical Support Specialist

Ikea Italia S.p.A.

Who are you?

- You hold a degree (high school diploma, university degree, or ITS certification) in computer science, business information systems, or a related field.
- You have a strong passion for technology.
- You are highly interested in process digitalization, including applications in the retail sector.
- You are eager to join a program focused on training, development, and professional growth.

What are you gonna do?

- Working closely with IT and digital area leaders and/or managers, you will be responsible for:
  - Assisting the international team in resolving daily IT issues (hardware, software, infrastructure, etc.);
  - Supporting the team in digitalizing processes (sales, logistics, point-of-sale systems, electronic payments, evaluation of new workflows, etc.);
  - Implementing new digital tools (mobile planning, IKEA app, etc.);
  - Aiding the team in the daily management of new digital projects.

What is offered?

- The position offers an initial full-time internship (40 hours per week) with a duration of 6 months. Upon successful completion of the program and a positive evaluation, a long-term position within the company may be considered.
- Compensation includes a monthly allowance of €850 and free access to the company cafeteria during working hours.
- Work location: Carugate (MI).

Actions 4/4

- ☑ 1. Apply to the internship

  Apply for this job!

- ☑ 2. Fill in the questionnaire

  Compile the survey!

- ☑ 3. You have been hired!

  Open a complaint.

- ☑ 4. You have completed the internship!

  Judge your experience!

Marco Vidotto
Politecnico di Pordenone

⭐ **Everything is fine...**
- All your general information is already been pulled from your university's system.
  You have uploaded a personal CV, and it has been indexed.

Some suggestions about your current CV...

Content and Structure ⌃
- Use a clear and readable layout: choose a professional font and divide the content into well-defined sections.
- Tailor your CV to the desired position: highlight experiences and skills relevant to the specific role.
- Include a professional summary: a brief introduction that highlights your strengths and career objectives.

Skills and Experience ⌄

Language and Style ⌄

Technical Details ⌄

Upload your CV!
Please upload your CV to be processed by S&C.

Choose a file or drag&drop it here!
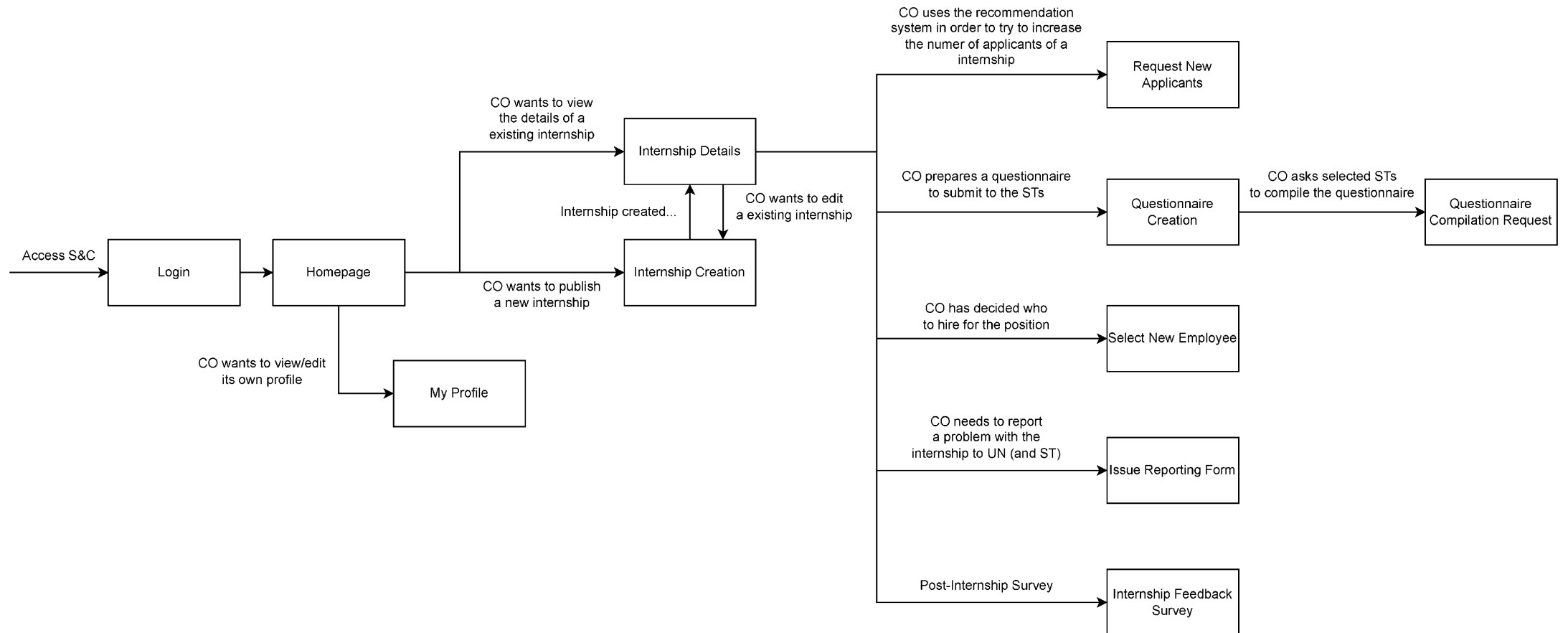PDF files only, up to 5MB

Browse File

my-cv.pdf ⊗
PDF 60 KB of 120 KB • ✳ Uploading...

- User Flow

Search

Sorting criteria:

✓ Recent updates

Alphabetical (Job Title)

Filter by status:

✓ Published   ✓ Selecting

✓ Ongoing   ✓ Completed

Suspended   Terminated

⭐ Publish a new internship

Part-Time Sales Assistant

Closing date: 2025-01-18
Total applicants: 21

Published

Stage Digital & Technical Support Specialist

Ending date: 2025-06-12
Employee: Marco Vidotto

Ongoing

Junior Workforce Planner - Remote Customer Meeting Point

Ending date: 2024-12-12
Employee: Emma Bianchessi

Completed

Stage HR - Specialist

Ending date: 2024-10-13
Employee: Lucia Verzilli

Completed

Publish a new internship

Describe the job like as you are talking directly to a new employee.

Title

Stage Digital & Technical Support Specialist

Application deadline

2024-12-18

Internship ending date

2025-06-01

Who is the ideal employee?

- You hold a degree (high school diploma, university degree, or ITS certification) in computer science, business information systems, or a related field.
- You have a strong passion for technology.
- You are highly interested in process digitalization, including applications in the retail sector.
- You are eager to join a program focused on training, development, and professional growth.

Next

Publish a new internship

Describe the job like as you are talking directly to a new employee.

What are they gonna do?

- Working closely with IT and digital area leaders and/or managers, you will be responsible for:
  - Assisting the international team in resolving daily IT issues (hardware, software, infrastructure, etc.);
  - Supporting the team in digitalizing processes (sales, logistics, point-of-sale systems, electronic payments, evaluation of new workflows, etc.);
  - Implementing new digital tools (mobile planning, IKEA app, etc.);
  - Aiding the team in the daily management of new digital projects.

What are you offering?

- The position offers an initial full-time internship (40 hours per week) with a duration of 6 months. Upon successful completion of the program and a positive evaluation, a long-term position within the company may be considered.
- Compensation includes a monthly allowance of €850 and free access to the company cafeteria during working hours.
- Work location: Carugate (MI).

Publish

Stage Digital & Technical Support Specialist

This is how your adv. is looking like on the student's side.

Who are you?

- You hold a degree (high school diploma, university degree, or ITS certification) in computer science, business information systems, or a related field.
- You have a strong passion for technology.
- You are highly interested in process digitalization, including applications in the retail sector.
- You are eager to join a program focused on training, development, and professional growth.

What are you gonna do?

- Working closely with IT and digital area leaders and/or managers, you will be responsible for:
  - Assisting the international team in resolving daily IT issues (hardware, software, infrastructure, etc.);
  - Supporting the team in digitalizing processes (sales, logistics, point-of-sale systems, electronic payments, evaluation of new workflows, etc.);
  - Implementing new digital tools (mobile planning, IKEA app, etc.);
  - Aiding the team in the daily management of new digital projects.

What is offered?

- The position offers an initial full-time internship (40 hours per week) with a duration of 6 months. Upon successful completion of the program and a positive evaluation, a long-term position within the company may be considered.
- Compensation includes a monthly allowance of €850 and free access to the company cafeteria during working hours.
- Work location: Carugate (MI).

[Edit informations]

Some suggestions about your current advertisement...

Logistics

- Specify the application process, including required documents and deadlines, to make it easier for candidates to apply.
- Mention remote or hybrid work possibilities, if applicable, to appeal to a broader pool of applicants.
- Include information about potential growth opportunities post-internship to make the listing more appealing.

Clarity and Formatting

Engagement and Tone

Clarity and Formatting

## Actions   1/5

☑ **1. Internship published.**

Currently, 23 candidates have applied.

[Expand applicant pool.]

- Integration and Testing

- The methodology used to implement S&C is the Bottom-Up approach.

- The incremental development alongside the use of drivers allows to test the system at multiple layers ensuring each one works as expected.

- The schema depicts the dependencies between modules and shows that the development of some modules can be parallelized shortening the development time.
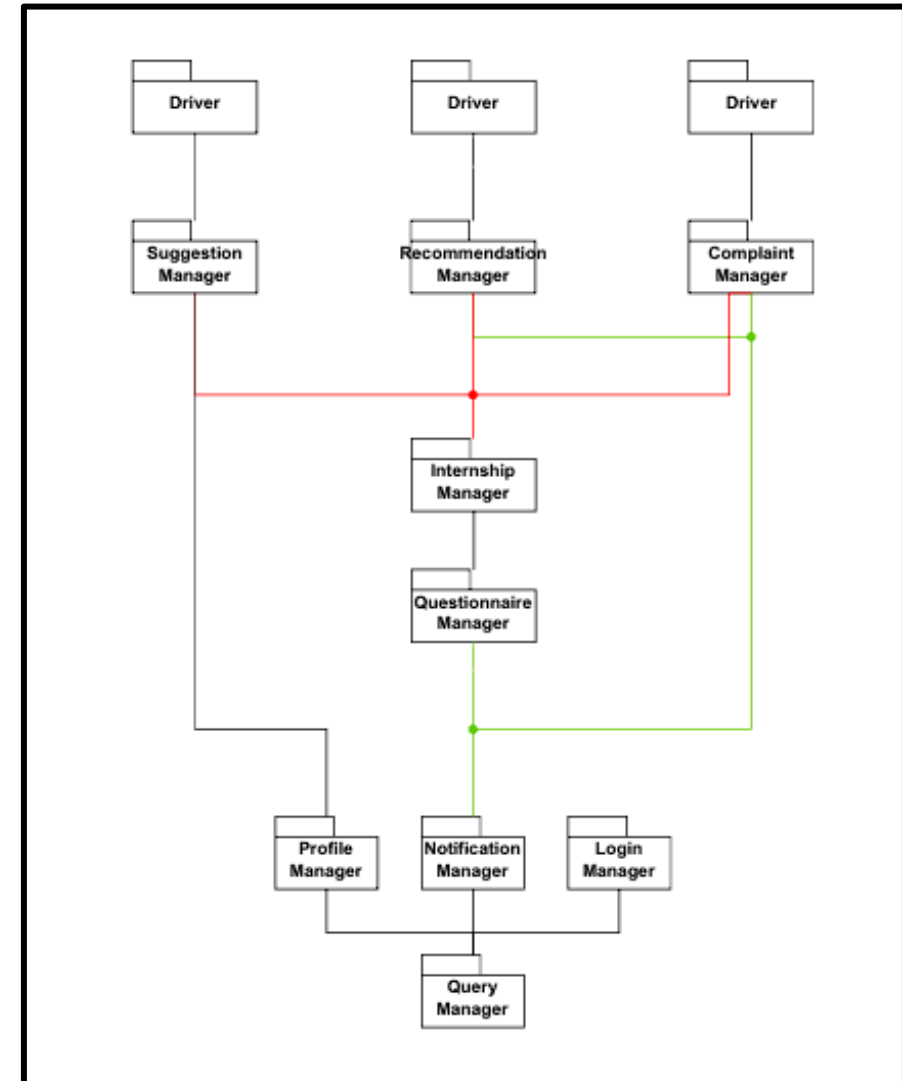
- Integration and Testing

- After the integration testing is over and the system is completed, further testing is required to evaluate the system form the user prospective.

- This phase of testing will follow a Black box strategy.

- The purpose is to focus on aspects that the driver-based testing does not cover. These are:
  - Performance Testing
  - Failure Testing
  - Endurance Testing
  - User Acceptance Testing