

# Functional Requests

## Functional Requirements

Request ID	Description	Priority	Source	Acceptance Criteria
F-001	The system must allow users to login according to their role.	High	Stakeholder Request	Users can log in and have assigned roles upon login.
F-002	The system must allow users to receive notifications of status changes regarding them on their email and in the notifications tab.	Medium	Stakeholder Request	Users receive email and in-app notifications for status updates related to requests, approvals, or rejections.
F-003	The system must allow currency conversion to euros.	Medium	Existing System	Conversion to euros is supported via a currency API, and results are accurate to the current exchange rate.
F-004	The system must allow employees to request a business trip.	High	Document Requirements	Employees can submit business trip requests with details like destination, date, and reason, and receive confirmation.
F-005	The system must allow employees to manage their business trip requests.	High	Document Requirements	Employees can view, edit, and sort their requests. System updates changes in real-time and sends status notifications.
F-006	The system must allow employees to manage their expense reports.	High	Document Requirements	Employees can create, view, edit, and delete expense reports related to business trips.
F-007	The system must allow employees to download reports of their requests in PDF format.	Medium	Existing System	Employees can generate a PDF report for any request they have submitted and download it successfully.

Request ID	Description	Priority	Source	Acceptance Criteria
<b>F-008</b>	The system must allow employees to view their business trip destination on a map.	Medium	Stakeholder Request	Employees see a map with their destination marked upon entering trip details. Map functionality is responsive and clear.
<b>F-009</b>	The system must allow department heads to manage all the requests of their department.	High	Stakeholder Request	Department heads can view, approve, or reject requests from department employees. Status updates are sent to relevant parties.
<b>F-010</b>	The system must allow department heads to view statistical representations of their department.	Medium	User Feedback	Department heads can view stats on trip costs and frequency within their department over selected time periods.
<b>F-011</b>	The system must allow department heads to download reports of their department requests in PDF format.	Medium	User Feedback	Department heads can generate a PDF report of departmental requests and download it successfully.
<b>F-012</b>	The system must allow accountants to manage expense reports.	High	Stakeholder Request	Accountants can review, approve, or reject submitted expense reports and provide reasons for rejections. Status updates are sent to relevant parties.
<b>F-013</b>	The system must allow accountants to request bank transactions for the employee (after the director's approval).	High	Existing System	Accountants can request bank transactions upon director approval, with successful request confirmation.
<b>F-014</b>	The system must allow accountants to view all awaiting payments.	High	Existing System	Accountants can see a list of pending payments and view detailed payment information.

Request ID	Description	Priority	Source	Acceptance Criteria
F-015	The system must allow accountants to download reports in PDF format.	Medium	Existing System	Accountants can generate and download PDF reports of pending and completed payments.
F-016	The system must allow the director to approve or decline payment requests.	High	Stakeholder Request	Directors can approve or decline payments with optional comments. Status updates are sent to relevant parties.
F-017	The system must allow the director to view statistics on all employees of the company.	Medium	User Feedback	Directors can view statistics on employee trips and expenses of the whole company.
F-018	The system must allow the director to download reports of all the requests in PDF format.	Medium	Stakeholder Request	Directors can generate and download company-wide reports in PDF format.
F-019	The system must allow the director to view all business trips.	High	Existing System	Directors can view a list of all business trips, filter by department, and view trip details.
F-020	The system must allow the admin to change parameters of the company.	Medium	Stakeholder Request	Admin can modify company settings (e.g., address, price per km), with all changes saved and applied in real-time.

## Other requests

### Performance

Request ID	Description	Priority
NF-PERF-001	The system shall handle a minimum of 1,000 concurrent users without noticeable performance degradation.	High

Request ID	Description	Priority
NF-PERF-002	The system shall process requests, such as user logins and notifications, within 2 seconds under normal load.	High
NF-PERF-003	The system shall support at least 10,000 transactions per day without requiring manual intervention or downtime.	High

User Experience

Request ID	Description	Priority
NF-UX-001	The system shall be responsive and provide consistent performance across all devices, including desktops, tablets, and smartphones.	High
NF-UX-002	The system shall have an intuitive and user-friendly interface that minimizes the learning curve for all user roles.	High
NF-UX-003	The system shall provide clear error messages and guidance for users when they encounter issues (e.g., invalid inputs).	Medium
NF-UX-004	The system shall include search and filter functionalities to allow users to quickly locate relevant data.	Medium

Reliability

Request ID	Description	Priority
NF-REL-001	The system shall maintain 99.9% uptime, ensuring continuous availability for all users.	High
NF-REL-002	The system shall provide robust error handling, ensuring that partial system failures do not result in loss of data or complete system downtime.	High
NF-REL-003	The system shall include automatic data backups every 24 hours to prevent data loss.	High
NF-REL-004	The system shall recover from failures (e.g., server crashes) within 10 minutes through automated recovery mechanisms.	High

Quality Standards

Request ID	Description	Priority
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Request ID	Description	Priority
NF-QUAL-001	The system shall be developed using standardized frameworks and libraries to ensure consistency and maintainability.	Medium
NF-QUAL-003	The system shall conform to ISO/IEC 25010 standards for software quality, emphasizing functionality, efficiency, and maintainability.	High
NF-QUAL-004	The system shall support integration with third-party tools and platforms, following industry-standard APIs and protocols.	Medium

Security

Request ID	Description	Priority
NF-SEC-001	The system shall enforce secure authentication mechanisms.	High
NF-SEC-002	All sensitive user data shall be encrypted in transit and at rest using modern encryption standards.	High
NF-SEC-004	Access to data and functionality shall be restricted based on user roles and permissions.	High
NF-SEC-005	The system shall comply with data protection regulations, such as GDPR or equivalent, to ensure user privacy and data security.	High

Stakeholder

1. Employee
2. Department head
3. Accountant
4. Director
5. Administrator
6. Development team
7. Associates

## 7.1 Teacher

## 7.2 Demonstrator

Actors and their functional requests:

### **A-1 Employee (initiator) is able to:**

- login according to their role F-001
- receive notifications of status changes regarding them F-002
- request a business trip F-004
- manage their business trip requests F-005
- manage their expense reports F-006
- download reports of their requests in PDF format F-007
- view their business trip destination on a map F-008

### **A-2 Department Head (initiator) is able to:**

- manage all the requests of their department F-009
- view statistical representations of their department F-010
- download reports of their department requests in PDF format F-011

### **A-3 Accountant (initiator) is able to:**

- manage expense reports F-012
- request bank transactions for the employee (after the director's approval) F-013
- view all awaiting payments F-014
- download reports in PDF format F-015

### **A-4 Director (initiator) is able to:**

- approve or decline payment requests F-016
- view statistics on all employees of the company F-017
- download reports of all the requests in PDF format F-018
- view all business trips F-019

### **A-5 Administrator (initiator) is able to:**

- change parameters of the company F-020

### **A-6 Database (participant) is able to:**

- store the data of every user and their role
- store the data of all the company departments
- store all trip requests data
- store all expense reports data