## SOFTWARE PLANNING AND UML

for

## ESPOLTEL HIRING MANAGER

Version 1.0

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# **Revision History**

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## 1 Introduction

#### 1.1 Summary

This document presents a comprehensive framework for the design, planning, and execution of the ESPOLTEL HIRING MANAGER system. This product integrates a robust risk management strategy, a detailed project execution timeline, and a structured Sprint Backlog plan. Through the inclusion of Unified Modeling Language (UML) diagrams, we provide a thorough representation of both the static and behavioral logic of the system, ensuring that the architecture adheres to SOLID principles and eliminates implementation inefficiencies.

Our primary objective is to meticulously define the planning and breakdown of the system's static structure, logical flow, behavioral processes, implementation strategies, and activity sequences. These components collectively support the realization of a user-centric, scalable, and maintainable product.

#### 1.2 Key features and Objetives

The ESPOLTEL HIRING MANAGER product is designed to streamline and enhance the recruitment process, leveraging a combination of web and mobile modules for maximum efficiency. Key objectives include:

- 1. **Risk Mitigation:** Developing a proactive risk management plan to address potential challenges in implementation and deployment.
- 2. **Comprehensive Planning:** Structuring the project execution into manageable phases using Agile methodologies.
- 3. **System Design:** Crafting static and behavioral UML diagrams to visualize the architecture, interactions, and workflows.
- 4. Adherence to SOLID Principles: Ensuring maintainability and scalability by avoiding anti-patterns and promoting clean code practices.

# 2 Risk management, product and sprint backlogs and scheduling

#### 2.1 Risk management

In this section, we will identify, quantify, and classify the various risks that may arise during the software development process. Additionally, we will provide a detailed assessment of the likelihood of occurrence, the potential impact of each risk, and the corresponding protocols to be followed in the event they materialize.

Description	Probability Range
Not Probable: The event is highly unlikely to occur.	0% - 20%
Low Probability: The event is unlikely but possible.	21% - 40%
Moderate Probability: The event has an even chance of occurring.	41% - 60%
High Probability: The event is likely to occur.	61% - 80%
Very High Probability: The event is almost certain to occur.	81% - 100%

Table 2.1: Probability of Occurrence

Impact Level	Description
Low Impact	Minimal effect on the project. No significant changes required.
Moderate Impact	Some delays or adjustments needed but manageable within the team.
High Impact	Significant disruptions, requiring immediate attention and resource allocation.
Critical Impact	Severe consequences on project delivery, with major delays or failure possible.

Table 2.2: Impact Levels

The following table outlines the identified risks associated with the project, including their probability of occurrence, potential impact, and the corresponding action protocol.

Id	Name	Probability	Impact	Action Protocol
001	Changes in requirements after development completion	High Probability	High Impact	Establish a communication protocol to clarify that no new requirements will be accepted after the design phase is finalized.
002	Discovery of implicit requirements not considered in the design	Very High Probability	High Impact	Accept and address the risk by updating the design and implementing the missing requirements.
003	Need for developer training	High Probability	High Impact	Provide immediate training on the required frameworks to minimize delays and ensure smooth development progress.
004	Difficulty understanding prior implementation, causing delays	Low Probability	Critical Impact	Reduce the probability by consulting previous implementers to gain insights into the system before development begins.
005	Schedule misalignment affecting task timelines	Not Probable	High Impact	Mitigate the risk by redistributing tasks and holding regular progress meetings to stay on track.
006	Performance drop due to prior monolithic architecture	Low Probability	High Impact	Accept the risk, inform the client, and propose alternative solutions to improve performance.
007	Database schema not designed for extensions	Low Probability	Moderate Impact	Accept the risk and adapt the existing schema to accommodate the new requirements.
008	Insufficient documenta- tion provided by the client	High Probabil- ity	Critical Impact	Reduce probability by maintaining active communication with the client to obtain necessary documentation.

Table 2.3: Risk Assessment and Action Protocols

## 2.2 Product backlog

ID	Priority	Dependencies	Item	Estimation
				(hours)
PB1	0	None	Research Spring Boot platform: Investigation of	4
			the architecture, modules, and functionalities of	
			Spring Boot relevant to the project. Includes	
			feasibility evaluation and the creation of a doc-	
			ument with findings and recommendations.	

ID P	Priority	Dependencies	Item	Estimation
				(hours)
PB2 0	)	None	Definition of the database schema: Design the	8
			database schema, including the definition of ta-	
			bles, relationships, and constraints. An Entity-	
			Relationship diagram and the SQL script for	
			database creation will be generated.	
PB3 1	_	PB1, PB2	As a user of ESPOLTEL Hiring Manager, I	6
		,	want to create my own account so that I can	
			access all controls related to my role, ensuring	
			my information and permissions are separate	
			from other users.	
PB4 1		PB3	As a user of ESPOLTEL Hiring Manager, I	8
		120	want to verify my email address upon registra-	O
			tion so that I can ensure secure access to the	
			system and confirm my identity.	
PB5 2	)	PB3	As a user of ESPOLTEL Hiring Manager, I	6
	,	1 150	want to create my own account using the mo-	O
			bile app, so that I can access all controls corre-	
			sponding to my role, and ensure that my infor-	
			mation and permissions are separate from those of other users.	
PB6 1		PB5		10
PD0 1	-	LD9	As a user of ESPOLTEL Hiring Manager, I	10
			want to verify my email address when regis-	
			tering from my mobile device, so that I can	
			ensure secure access to the system and confirm	
DD7 1		DDe	my identity.	4
PB7   1	-	PB3	As a user of ESPOLTEL Hiring Manager, I	4
			want to log in securely using my credentials so	
			that I can access features and project manage-	
DD0 1		DDF	ment tools.	
PB8   1	-	PB7	As a user of ESPOLTEL Hiring Manager, I	6
			want to select my role (Aspirant, Project Man-	
			ager, Project Director, or HR member) before	
			logging in so that I am directed to the appropri-	
			ate login process and access functionalities spe-	
			cific to my role.	
PB9   2	}	PB7	As a user of ESPOLTEL, I want to securely	5
			log in to the system using my credentials on my	
			mobile device, so that I can access the appro-	
			priate functions and features according to my	
			user role.	
PB10   2		PB8	As a user of ESPOLTEL, I want to be able	6
			to select my role (Aspirant, Project Manager,	
			Project Director, or HR member) on my mobile	
			device before logging in, so that I can be di-	
			rected to the specific features and functionalities	
			relevant to my role.	

ID	Priority	Dependencies	Item	Estimation
		_		(hours)
PB11	3	PB3	As a user of ESPOLTEL Hiring Manager, I	5
			want to be able to recover my password through	
			a secure and efficient process if I forget it, so	
			that I can regain access to the system and con-	
			tinue with my responsibilities without delay.	
PB12	3	PB5	As a user of ESPOLTEL Hiring Manager, I	6
			want to be able to recover my password through	
			a secure and efficient process by email from my	
			mobile device if I forget it, so that I can re-	
			gain access to the system and continue with my	
			responsibilities without delay.	
PB13	2	PB1,PB2	As an aspirant or manager, I want to have	12
			access to contracts or confidential agreements	
			pending my signature, so that I can review and	
			sign them digitally within the web application.	
PB14	1	P13	As an aspirant, I want to upload my digital	5
			certificate to the platform so that I can sign	
			documents such as contracts or confidentiality	
			agreements for the projects I have applied to.	
PB15	1	P13	As a manager, I want to upload my digital cer-	5
			tificate to the platform so that I can sign mul-	
			tiple documents such as contracts or confiden-	
			tiality agreements for the projects I manage.	
PB16	1	P14	As an aspirant, I want to digitally sign my	12
			contract and confidentiality agreement so that	
			I can complete the paperwork required for my	
			hiring process.	
PB17	1	P15	As a manager, I want to digitally sign multiple	12
			documents, such as contracts or confidentiality	
			agreements, simultaneously, so that I can save	
DD40		DD4.0	time and work more efficiently.	
PB18	3	PB16	As an aspirant, I want to view the contracts	6
			of the projects I have applied for and that are	
			currently active, so that I have a clear view of	
DD10	0	DD10	the agreements I have signed.	4
PB19	3	PB18	As an aspirant, I want to download the con-	4
			tracts of the projects I have applied for and that	
			are currently active, so that I have a record of	
PB20	3	PB16	the agreements I have signed.	6
1 1 1 2 0	) 	1 D10	<b>As</b> an aspirant, <b>I want</b> to view the contracts of the projects I have applied for and that are cur-	U
			rently active on my smartphone, so that I have	
			a clear view of the agreements I have signed.	
PB21	3	PB20	As an aspirant, I want to download the con-	4
1 D21	) 	1 1040	tracts of the projects I have applied for and that	4
			are currently active on my smartphone, so that	
			I have a record of the agreements I have signed.	
			I have a record of the agreements I have signed.	

ID	Priority	Dependencies	Item	Estimation
				(hours)
PB22	1	PB16	As an HR member, I want to validate the dig-	8
			ital signatures of aspirants so that I can ensure	
			contracts and agreements are formalized.	
PB23	2	PB3	As a project manager, I want to create a	12
			project by defining its name, description, start	
			date, end date, and type, so that the project's	
			objectives and timeline are clearly established.	
PB24	2	PB23	As a project manager, I want to define roles	6
			and profiles required for the project, including	
			necessary skills and experience for each profile,	
			so that aspirants can understand the require-	
			ments and apply to suitable positions.	
PB25	3	PB24	As a Director, I want to recommend an aspi-	8
			rant who has previously worked for ESPOLTEL	
			for a role in a project, based on their past perfor-	
			mance and experience, so that I have a worker	
			I trust in my project.	
PB26	2	PB24	As an HR member, I want to validate the pro-	12
			files created by project directors so that I can	
			edit, approve, the profiles and positions defined	
			for a project, ensuring they align with the com-	
			pany's standards and requirements.	
PB27	2	PB23	As a project manager or director at ESPOL-	8
			TEL, I want to monitor on my smartphone the	
			projects under my supervision, so that I can	
			maintain better control and make informed de-	
			cisions.	
PB28	2	PB23	As a Director or Manager, I want to view the	10
			resources and budget assigned to my project, $\mathbf{so}$	
			that I can track project expenses and resource	
			utilization.	
PB29	1	PB8	As an aspirant, I want to apply for a position	10
			in a project of interest where I meet the required	
			profile so that I can obtain the desired position.	
PB30	2	PB29	As an aspirant, I want to cancel my postulation	8
			for a specific role or hiring profile, so that I	
			can withdraw from a recruitment process if my	
			circumstances change.	
PB31	2	PB8, PB29	As an HR member, I want to schedule inter-	10
			views with aspirants, specifying the date, time,	
			and interviewer, so that the selection process	
			can be efficiently conducted.	
PB32	2	PB31	As a HR member, I want to record interview	8
			results and observations, including scores and	
			comments, so that there is a formal record of	
			each aspirant's evaluation.	

ID	Priority	Dependencies	Item	Estimation
DDaa	2	DD04 DD00	A III	(hours)
PB33	2	PB24, PB29	As an HR member, I want to verify the require-	8
			ments based on the information of an aspirant,	
			so that I can ensure they meet the necessary	
PB34	3	PB32	qualifications for a project.	4
P D 34	3	F D 0 2	As an HR member, I want to add private com-	4
			ments in aspirants' postulations so that I can keep a record of observations and notes during	
			the selection process.	
PB35	2	PB32, PB33,	As an HR member, I want to select the best	10
1 D30	_ <u> </u>	PB34	aspirants based on interview results and fulfilled	10
		1 D04	requirements, so that I can identify the most	
			suitable candidates for each role.	
PB36	2	PB8	As an HR member, I want to create and man-	15
1 1000	<i>Δ</i>	1 100	age forms for pre-hiring and hiring processes,	10
			defining mandatory fields and document up-	
			loads, so that aspirants can provide the nec-	
			essary information.	
PB37	2	PB8	As an HR member, I want to upload templates	12
1 501		1 00	for contracts and agreements, so that appropri-	12
			ate templates are available for generating per-	
			sonalized documents for aspirants.	
PB38	2	PB29, PB36	As an aspirant, I want to upload my per-	8
1 200	_	1220, 1200	sonal documents (such as CV, ID, certificates,	
			etc.) and relevant information by completing	
			forms defined by HR, so that I can fulfill	
			postulation requirements.	
PB39	2	PB37	As an HR member, I want to generate con-	12
			tracts and agreements from templates, so that	
			I can save time in creating personalized docu-	
			ments.	
PB40	2	PB32, PB33,	As an HR member, I want to view aspirants	4
		PB34	by specific skills and experience, so that I can	
			make it easier to select candidates who meet the	
			project requirements.	
PB41	2	PB8	<b>As</b> a Director, HR Member, or Manager, <b>I want</b>	10
			to view the hires or personnel associated with a	
			project, so that I have an overview of the team	
			composition and recruitment progress.	
PB42	2	None	As a user of ESPOLTEL Hiring Manager, I	8
			want to be able to search and filter informa-	
			tion across the platform, including projects, as-	
			pirants, roles, documents, and other relevant	
			data, so that I can quickly find and focus on	
<b>DD</b> : :		DD10	the data I need.	
PB43	1	PB10	As a user of the ESPOLTEL Hiring Manager	12
			mobile app, I need to receive notifications for	
			any important events in the recruitment pro-	
			cess, so that I can stay informed and respond	
			promptly.	

ID	Priority	Dependencies	Item	Estimation
				(hours)
PB44	2	PB8	As an aspirant, I want to monitor on my smart-	10
			phone the projects I have applied for, so that	
			I can stay updated on their progress and better	
			manage my involvement.	
PB45	2	PB31	As an aspirant, I want to receive notifications	8
			about my scheduled interviews, including re-	
			minders and updates, so that I can be prepared	
			and attend interviews on time.	
PB46	4	PB45	Testing and deployment	24

Table 2.4: Product Backlog of ESPOLTEL Hiring Manager

### 2.3 Sprint backlog

The project sprints will be 4 organized for 3 weeks duration.

Product Back-	User Story	Tasks	Assigned To
$\log$ Item			
PB1	Research Spring Boot platform (4 hours)	-Research architecture, modules, and functional- ities of Spring Boot 3 hours -Feasibility evaluation of this framework 1 hour	<ul><li>Jeremy Poveda,</li><li>Diego Flores, Ariana Palacios</li><li>Alex Vizuete,</li><li>Jose Ramos</li></ul>
PB2	Definition of the database schema (8 hours)	-Design the database schema (tables, relationships, and constraints) 4 hours -Generate Entity-Relationship diagram and SQL script 4 hours	- Diego Flores, Ariana Palacios - Jeremy Poveda, Alex Vizuete
PB3	As a user of ESPOLTEL Hiring Manager, I want to create my own account so that I can access all controls related to my role, ensuring my information and permissions are separate from other users. (6 hours)	<ul> <li>Design UI for user registration (web) 2 hours</li> <li>Implement backend logic for user registration and role management 3 hours</li> <li>Database integration for user accounts 1 hour</li> </ul>	<ul><li>Jeremy Poveda</li><li>Jose Ramos</li><li>Ariana Palacios</li></ul>
PB4	As a user of ESPOLTEL Hiring Manager, I want to verify my email address upon registration so that I can ensure secure ac- cess to the system and confirm my identity. (8 hours)	<ul> <li>Implement email sending functionality (e.g., using Spring Mail) 3 hours</li> <li>Create email verification endpoint 3 hours</li> <li>Integrate email verification with registration flow.</li> <li>2 hours</li> </ul>	<ul><li>Alex Vizuete</li><li>Diego Flores</li><li>Jeremy Poveda</li></ul>

Product	User Story	Tasks	Assigned To
Back-			
log			
PB5	As a user of ESPOLTEL Hir-	- Design UI for user regis-	- Diego Flores
1 D0	ing Manager, I want to create	tration (mobile) 2 hours	- Jose Ramos
	my own account using the mo-	- Implement backend logic	- Ariana Palacios
	bile app, so that I can access	for user registration and	
	all controls corresponding to my	role management (mobile).	
	role, and ensure that my infor-	- 3 hours	
	mation and permissions are sep-	- Database integration for	
	arate from those of other users.	user accounts (mobile) 1	
	(6 hours)	hour	
PB6	As a user of ESPOLTEL Hir-	- Adapt email sending	- Alex Vizuete
	ing Manager, <b>I want</b> to verify	functionality for mobile	- Jeremy Poveda
	my email address when register-	3 hours	- Jose Ramos
	ing from my mobile device, so	- Create email verification	
	that I can ensure secure access to	endpoint (mobile) 4	
	the system and confirm my iden-	hours	
	tity. (10 hours)	- Integrate email verifica- tion with mobile registra-	
		tion flow 3 hours	
PB7	As a user of ESPOLTEL Hir-	- Design UI for user login	- Jose Ramos
I Di	ing Manager, I want to log in	(web) 1 hour	- Ariana Palacios
	securely using my credentials so	- Implement backend logic	- Alex Vizuete
	that I can access features and	for authentication 2	
	project management tools. (4	hours	
	hours)	- Implement session man-	
		agement 1 hour	
PB8	As a user of ESPOLTEL Hiring	- Design UI for role selec-	- Diego Flores
	Manager, I want to select my	tion 3 hours	- Jeremy Poveda
	role (Aspirant, Project Manager,	- Implement role-based ac-	
	Project Director, or HR member)	cess control logic 3 hours	
	before logging in so that I am		
	directed to the appropriate login process and access functionalities		
	specific to my role. (6 hours)		
PB9	As a user of ESPOLTEL, I want	- Design UI for user login	- Jeremy Poveda
1 20	to securely log in to the sys-	(mobile) 2 hours	- Ariana Palacios
	tem using my credentials on my	- Implement backend logic	- Alex Vizuete
	mobile device, so that I can	for authentication (mo-	
	access the appropriate functions	bile) 2 hours	
	and features according to my	- Implement session man-	
	user role. (5 hours)	agement (mobile) 1	
		hour	

Product	User Story	Tasks	Assigned To
Back-			
$\log$			
Item			
PB10	As a user of ESPOLTEL, I want	- Design UI for role selec-	- Diego Flores
	to be able to select my role (As-	tion (mobile) 3 hours	- Jose Ramos
	pirant, Project Manager, Project	- Implement role-based ac-	
	Director, or HR member) on my	cess control logic (mobile).	
	mobile device before logging in,	- 3 hours	
	so that I can be directed to the		
	specific features and functionali-		
	ties relevant to my role. (6 hours)		
PB11	As a user of ESPOLTEL Hiring	- Design UI for password	- Jose Ramos
	Manager, I want to be able to	recovery 2 hours	- Ariana Palacios
	recover my password through a	- Implement backend logic	
	secure and efficient process if I	for password recovery 3	
	forget it, so that I can regain ac-	hours	
	cess to the system and continue		
	with my responsibilities without		
	delay. (5 hours)		
PB12	As a user of ESPOLTEL Hir-	- Design UI for password	- Diego Flores
	ing Manager, <b>I want</b> to be able	recovery (mobile) 2	- Ariana Palacios
	to recover my password through	hours	- Alex Vizuete
	a secure and efficient process by	- Implement backend logic	
	email from my mobile device if I	for password recovery, in-	
	forget it, so that I can regain ac-	cluding email sending (mo-	
	cess to the system and continue	bile) 3 hours	
	with my responsibilities without	- Integrate password recov-	
	delay. (6 hours)	ery with mobile login flow.	
		- 1 hour	

Table 2.5: Sprint 1 of ESPOLTEL Hiring Manager

Product	User Story	Tasks	Assigned To
Back-			
$\log$			
Item			
PB13	As an aspirant or manager, I	Design UI for con-	Jeremy Poveda
	want to have access to contracts	tract/agreement viewing.	Jose Ramos
	or confidential agreements pend-	- 4 hours	Alex Vizuete
	ing my signature, so that I can	Implement backend logic	
	review and sign them digitally	for fetching pending docu-	
	within the web application. (12)	ments 4 hours	
		Integrate digital signature	
		service/library 4 hours	

Product Back- log	User Story	Tasks	Assigned To
PB14	As an aspirant, I want to upload my digital certificate to the platform so that I can sign documents such as contracts or confidentiality agreements for the projects I have applied to. (5)	Design UI for digital certificate upload 2 hours Implement backend logic for certificate storage and validation 3 hours	Diego Flores Ariana Palacios
PB15	As a manager, I want to upload my digital certificate to the plat- form so that I can sign multi- ple documents such as contracts or confidentiality agreements for the projects I manage. (5)	Design UI for digital certificate upload (Manager) 2 hours Implement backend logic for certificate storage and validation (Manager) 3 hours	Jeremy Poveda Alex Vizuete
PB16	As an aspirant, I want to digitally sign my contract and confidentiality agreement so that I can complete the paperwork required for my hiring process. (12)	Integrate digital signature functionality for aspirants 6 hours Design UI for signing contracts and agreements 3 hours Update database to store signature data and status 3 hours	Diego Flores Jeremy Poveda
PB17	As a manager, I want to digitally sign multiple documents, such as contracts or confidentiality agreements, simultaneously, so that I can save time and work more efficiently. (12)	Implement bulk/batch digital signature functionality 8 hours Design UI for bulk signing 2 hours Update backend logic to handle multiple signatures 2 hours	Diego Flores Ariana Palacios Jeremy Poveda
PB18	As an aspirant, I want to view the contracts of the projects I have applied for and that are cur- rently active, so that I have a clear view of the agreements I have signed. (6)	Design UI for contract viewing (aspirant) 3 hours Implement backend logic for fetching and displaying active contracts 3 hours	Alex Vizuete Jose Ramos
PB19	As an aspirant, I want to down- load the contracts of the projects I have applied for and that are currently active, so that I have a record of the agreements I have signed. (4)	Implement contract down-load functionality 2 hours Integrate with secure document storage 2 hours	Alex Vizuete Jose Ramos

Product	User Story	Tasks	Assigned To
Back- log Item			
PB20	As an aspirant, I want to view the contracts of the projects I have applied for and that are cur- rently active on my smartphone, so that I have a clear view of the agreements I have signed. (6)	Design mobile UI for contract viewing 3 hours  Adapt backend logic for mobile contract fetching 3 hours	Diego Flores Ariana Palacios
PB21	As an aspirant, I want to download the contracts of the projects I have applied for and that are currently active on my smartphone, so that I have a record of the agreements I have signed.  (4)	Implement mobile contract download functionality 2 hours Integrate with mobile se- cure storage 2 hours	Diego Flores Jose Ramos
PB22	As an HR member, I want to validate the digital signatures of aspirants so that I can ensure contracts and agreements are formalized. (8)	Implement backend logic for signature validation 5 hours Design UI for displaying signature validation status. - 3 hours	Ariana Palacios Jose Ramos
PB23	As a project manager, I want to create a project by defining its name, description, start date, end date, and type, so that the project's objectives and timeline are clearly established. (12)	Design UI for project creation form 4 hours Implement backend logic for project creation and data validation 5 hours Database integration for project data 3 hours	Jose Ramos Ariana Palacios Diego Flores
PB24	As a project manager, I want to define roles and profiles required for the project, including necessary skills and experience for each profile, so that aspirants can understand the requirements and apply to suitable positions.  (6)	Design UI for role/profile definition 3 hours Implement backend logic for storing role/profile data 3 hours	Jose Ramos Alex Vizuete
PB25	As a Director, I want to recommend an aspirant who has previously worked for ESPOLTEL for a role in a project, based on their past performance and experience, so that I have a worker I trust in my project. (8)	Design UI for aspirant recommendation 3 hours Implement backend logic for recommendation processing, including fetching past performance data 5 hours	Jeremy Poveda Alex Vizuete

Product	User Story	Tasks	Assigned To
Back-			
$\log$			
Item			
PB26	As an HR member, I want to	Design UI for profile review	Ariana Palacios
	validate the profiles created by	and approval 4 hours	Diego Flores
	project directors so that I can	Implement backend logic	Jeremy Poveda
	edit, approve, the profiles and	for profile validation work-	
	positions defined for a project,	flow 5 hours	
	ensuring they align with the com-	Database integration for	
	pany's standards and require-	profile status 3 hours	
	ments. (12)		
PB27	As a project manager or direc-	Design mobile UI for	Diego Flores
	tor at ESPOLTEL, <b>I want</b> to	project monitoring 4	Jose Ramos
	monitor on my smartphone the	hours	
	projects under my supervision,	Implement mobile backend	
	so that I can maintain better	logic for retrieving project	
	control and make informed deci-	data 4 hours	
	sions. (8)		
PB28	As a Director or Manager, I	Design UI for resource and	Ariana Palacios
	want to view the resources and	budget viewing 4 hours	Alex Vizuete
	budget assigned to my project,	Implement backend logic	
	so that I can track project ex-	for retrieving resource and	
	penses and resource utilization.	budget data 6 hours	
	(10)		

Table 2.6: Sprint 2 of ESPOLTEL Hiring Manager

Product	User Story	Tasks	Assigned To
Back-			
log			
Item			
PB29	As an aspirant, I want to apply	Design UI for	Alex Vizuete
	for a position in a project of in-	project/position appli-	Jose Ramos
	terest where I meet the required	cation 4 hours	
	profile so that I can obtain the	Implement backend logic	
	desired position. (10)	for application processing.	
		- 6 hours	
PB30	As an aspirant, I want to can-	Design UI for postulation	Jeremy Poveda
	cel my postulation for a specific	cancellation 3 hours	Diego Flores
	role or hiring profile, so that	Implement backend logic	
	I can withdraw from a recruit-	for postulation cancella-	
	ment process if my circumstances	tion 5 hours	
	change. (8)		
PB31	As an HR member, I want	Design UI for interview	Diego Flores
	to schedule interviews with aspi-	scheduling 4 hours	Ariana Palacios
	rants, specifying the date, time,	Implement backend logic	
	and interviewer, so that the se-	for interview scheduling	
	lection process can be efficiently	and notifications 6 hours	
	conducted. (10)		

Product Back- log Item	User Story	Tasks	Assigned To
PB32	As an HR member, I want to record interview results and observations, including scores and comments, so that there is a formal record of each aspirant's evaluation. (8)	Design UI for recording interview results 3 hours Implement backend logic for storing interview data 5 hours	Jeremy Poveda Diego Flores
PB33	As an HR member, I want to verify the requirements based on the information of an aspirant, so that I can ensure they meet the necessary qualifications for a project. (8)	Design UI for requirement verification 3 hours Implement backend logic for requirement checking 5 hours	Jose Ramos Ariana Palacios
PB34	As an HR member, I want to add private comments in aspi- rants' postulations so that I can keep a record of observations and notes during the selection pro- cess. (4)	Design UI for adding private comments 2 hours Implement backend logic for storing private comments 2 hours	Alex Vizuete Jeremy Poveda
PB35	As an HR member, I want to select the best aspirants based on interview results and fulfilled requirements, so that I can identify the most suitable candidates for each role. (10)	Design UI for aspirant selection 4 hours Implement backend logic for selection processing 6 hours	Diego Flores Jose Ramos
PB36	As an HR member, I want to create and manage forms for pre-hiring and hiring processes, defining mandatory fields and document uploads, so that aspirants can provide the necessary information. (15)	Design UI for form creation and management 5 hours Implement backend logic for form data storage and retrieval 7 hours Integrate document upload functionality 3 hours	Jose Ramos Alex Vizuete Ariana Palacios
PB37	As an HR member, I want to upload templates for contracts and agreements, so that appropriate templates are available for generating personalized documents for aspirants. (12)	Design UI for template upload and management 4 hours Implement backend logic for template storage and retrieval 5 hours Implement template versioning 3 hours	Jeremy Poveda Jose Ramos Alex Vizuete
PB38	As an aspirant, I want to upload my personal documents (such as CV, ID, certificates, etc.) and relevant information by com- pleting forms defined by HR, so that I can fulfill postulation requirements. (8)	Implement document upload and form submission functionality 5 hours Update UI to integrate with forms defined by HR 3 hours	Ariana Palacios Alex Vizuete

Product	User Story	Tasks	Assigned To
Back-			
log			
Item			
PB39	As an HR member, I want	Implement backend logic	Ariana Palacios
	to generate contracts and agree-	for document generation	Diego Flores
	ments from templates, so that I	from templates 8 hours	Jeremy Poveda
	can save time in creating person-	Design UI for document	
	alized documents. (12)	generation 4 hours	

Table 2.7: Sprint 3 of ESPOLTEL Hiring Manager

Product	User Story	Tasks	Assigned To
Back-			
log			
Item			
PB40	As an HR member, I want to	Enhance search/filter func-	Jeremy Poveda
	view aspirants by specific skills	tionality for aspirants 4	Diego Flores
	and experience, so that I can	hours	
	make it easier to select candi-		
	dates who meet the project re-		
	quirements. (4)		
PB41	<b>As</b> a Director, HR Member,	Design UI for viewing	Jose Ramos
	or Manager, <b>I want</b> to view	project personnel 4	Alex Vizuete
	the hires or personnel associated	hours	
	with a project, so that I have an	Implement backend logic	
	overview of the team composition	for retrieving project per-	
	and recruitment progress. (10)	sonnel data 6 hours	
PB42	As a user of ESPOLTEL Hir-	Design UI for search and	Alex Vizuete
	ing Manager, <b>I want</b> to be able	filter functionality 3	Jeremy Poveda
	to search and filter information	hours	
	across the platform, including	Implement backend logic	
	projects, aspirants, roles, docu-	for search and filtering	
	ments, and other relevant data,	5 hours	
	so that I can quickly find and		
77	focus on the data I need. (8)		
PB43	As a user of the ESPOLTEL Hir-	Set up push notification	Diego Flores
	ing Manager mobile app, <b>I need</b>	service (e.g., Firebase	Jose Ramos
	to receive notifications for any	Cloud Messaging) 4	Ariana Palacios
	important events in the recruit-	hours	
	ment process, so that I can stay	Implement backend logic	
	informed and respond promptly.	to trigger notifications 4	
	(12)	hours	
		Integrate notifications	
		with mobile app 4 hours	

Product	User Story	Tasks	Assigned To
Back-			
$\log$			
Item			
PB44	As an aspirant, I want to	Design mobile UI for ap-	Jose Ramos
	monitor on my smartphone the	plication monitoring 4	Ariana Palacios
	projects I have applied for, so	hours	
	that I can stay updated on their	Implement mobile backend	
	progress and better manage my	logic for retrieving applica-	
	involvement. (10)	tion status 6 hours	
PB45	As an aspirant, I want to receive	Implement notification	Jeremy Poveda
	notifications about my scheduled	logic for interview schedul-	Alex Vizuete
	interviews, including reminders	ing 5 hours	
	and updates, so that I can be	Integrate with calen-	
	prepared and attend interviews	dar/reminder system if	
	on time. (8)	needed 3 hours	
PB46	Testing and deployment (24)	Functional testing 8	All team mem-
		hours	bers
		Integration testing 8	
		hours	
		Performance testing 4	
		hours	
		Deployment to stag-	
		ing/production 4 hours	

Table 2.8: Sprint 4 of ESPOLTEL Hiring Manager

## 2.4 Scheduling

ID	Description	Dep	Product Back- log Items	Hours	Earliest Start Time	Lastest Finish Time	Float
A	System Founda- tion	None	PB1, PB2	12	0	12	0
В	User Management	A	PB3, PB4, PB5, PB6, PB7, PB8, PB9, PB10, PB11, PB12	62	12	74	0
С	Digital Signature	В	PB13, PB14, PB15, PB16, PB17, PB18, PB19, PB20, PB21, PB22	74	74	249	101
D	Project Creation	В	PB23, PB24, PB25, PB26, PB27, PB28	56	74	130	0
Е	Aspirant Postula- tion	D	PB29, PB30	18	130	148	0
F	Interviews	D, E	PB31, PB32, PB33, PB34, PB35	40	148	227	39
G	Document Generation	E	PB36, PB37, PB38, PB39	47	148	195	0
Н	Search and Filtering	E, F	PB40, PB41, PB42	22	188	249	39
Ι	Notifications	G	PB43, PB44, PB45	30	195	225	0
J	Testing and Deployment	I	PB46	24	225	249	0

Table 2.9: Activity Arrow table for Macro-activities ESPOLTEL Hiring Manager

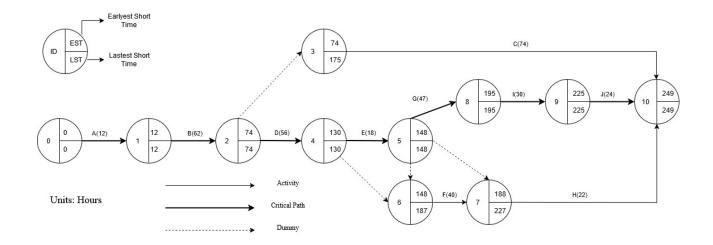


Figure 2.1: Activity Arrow Diagram of ESPOLTEL HIRING MANAGER

## 3 Static UML

#### 3.1 Use Cases - Web Module

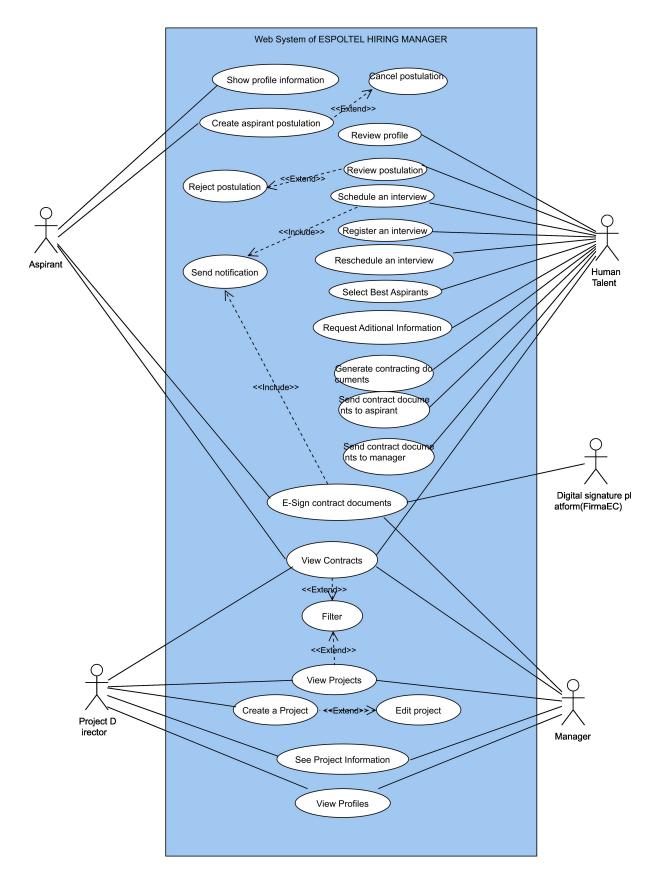


Figure 3.1: Web Module Use Cases Diagram of ESPOLTEL HIRING MANAGER

Field	Description
ID	UC001
Name	Show postulation information
Created by	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	8/12/24
Date last edition	3/1/25
Description	The system will show the aspirant the requirements, activities,
	and reference salary (e.g.) of the system using a code.
Actors	Aspirant
Extends	Nothing
Preconditions	The aspirant has his account created and is logged in, as well as
	the project code to which he is interested.
Postconditions	The aspirant only must see the profile he/she wants to apply for
	with the unique code.
Flow	1. The aspirant enter into personnel login section.
	2. The aspirant enter his credentials.
	3. The system show a promt in the home page to enter a code.
	4. The aspirant enters the code of the project he/she is interested
	in.
	5. The system shows the applicant the information (Job and pro-
	file description, activities to be performed, Project name, Project
	description, profile requirements, and Referencial salary) of the
	profile he/she wants to apply for.
Alternative Flow	There are no alternative flows.

Table 3.1: Use Case Documentation - (UC001) Show Postulation Information

Field	Description
ID	UC002
Name	Create aspirant postulation
Created by	José Ramos
Updated by	José Ramos
Date creation	8/12/24
Date last edition	7/01/25
Description	The aspirant wants to send information in the project they are interested in.
Actors	Aspirant
Extends / Includes	Cancel Postulation
Preconditions	<ul> <li>The aspirant has his account created and logged in, as well as the project code to which he is interested.</li> <li>The aspirant has a valid project code.</li> </ul>
Postconditions	The system registers the application of the aspirant.
Flow	1. The aspirant logs in with his/her credentials.
	2. The aspirant enters the valid code of a project.
	3. The aspirant clicks on the project that appears on the screen.
	4. The aspirant reads the project information.
	5. The aspirant makes sure that he/she meets the minimum re-
	quirements to participate in the project.
	6. The aspirant applies for the job.
	7. The aspirant uploads the documents required by the system
	(Curriculum Vitae and copy of ID).
	8. The aspirant sends the application.
Alternative Flow	
	4a. The aspirant reads the project information.
	1. The aspirant verifies that he or she does not meet the minimum requirements to participate in the project.
	2. The aspirant returns to the home screen.
	8a. The aspirant sends the application.
	3. The aspirant the aspirant realizes that he/she has postulate incorrectly.
	4. The aspirant cancels application.

Table 3.2: Use Case Documentation - (UC002) Create Aspirant Postulation

Field	Description
ID	UC003
Name	Review profile
Created by	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	8/12/24
Date last edition	12/01/25
Description	Human Talent must review the profiles created by the di-
	rector to ensure they meet the established standards and
	requirements.
Actors	Human Talent
Extends	Reject Profile
Preconditions	The director has created the profiles.
	The profiles have been sent to Human Talent for review.
Postconditions	Human Talent confirms that the profiles meet the required
	standards.
	Human Talent notifies the director about the approval or
	rejection of the profiles.
Flow	1. Human Talent enters the profile review section.
	2. Human Talent identifies the profiles created by the direc-
	tor.
	3. Human Talent reviews the information of each profile.
	<u> </u>
	5. Human Talent edits in case of errors.
Alternative Flow	
	4a. Human Talent identifies that the profiles do meet the
	required standards.
	1. Human Talent accept the profile.
	2. The profile enters in 'in hiring' status.
Alternative Flow	required standards.  1. Human Talent accept the profile.

Table 3.3: Use Case Documentation - (UC003) Review Profile

Field	Description
ID	UC004
Name	Review postulation
Created by	José Ramos
Updated by	José Ramos
Date creation	8/12/24
Date last edition	12/01/25
Description	Human Talent verifies the submitted postulations, ensuring
	the aspirant's data and documentation meet the required standards.
Actors	Human Talent
Extends	Reject Postulation
Preconditions	The aspirant must have sent the form with his CV and ID.
Postconditions	The aspirant is notified via email if their postulation review
	was successful.
Flow	1. Human Talent logs into the system and navigates to the
	postulation review section.
	2. Human Talent selects a postulation to review.
	3. Human Talent verifies the aspirant's data for consistency
	and correctness.
	4. Human Talent reviews the documentation submitted by
	the aspirant (CV and copy of ID).
	5. Human Talent writes observations or feedback if neces-
	sary.
	6. Human Talent sends a notification email to the aspirant
41.	about the result of the review.
Alternative Flow	3a. Human Talent identifies inconsistencies in the aspirant's
	data or finds incorrect documentation.
	4. Human Talent writes a rejection message specifying the
	issues.
	5. Human Talent removes the postulation from the approval
	process.

Table 3.4: Use Case Documentation - (UC004) Review Postulation

Field	Description
ID	UC005
Name	Schedule an interview
Created by	Team 3
Updated by	Alex Vizuete
Date creation	08/01/25
Date last edition	08/01/25
Description	Human Talent Staff need to schedule an interview for accepted aspirants by selecting a specific day and time.
Actors	Human Talent
Extends	None
Preconditions	
	• Aspirant must be marked as accepted for the interview process.
Postconditions	
	• Aspirants are notified about the scheduled interview.
	• Human Talent Staff can see the interview in a calendar.
Flow	<ol> <li>Human Talent Assistant navigates to the interviews tab.</li> <li>The Assistant clicks on the "Create New Interview" button.</li> </ol>
	3. The Assistant selects a date using the input calendar and
	specifies the interview time.
	4. The Assistant selects the aspirant for the interview.
	5. The Assistant clicks the "Create" button.
	6. The interview is scheduled and displayed in the calendar
41.	in the interviews section.
Alternative Flow	None

Table 3.5: Use Case Documentation - (UC005) Schedule an Interview

Field	Description
ID	UC006
Name	Register an interview
Created by	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	12/01/25
Date last edition	12/01/25
Description	Human Talent Staff registers the outcome of an interview by reviewing the aspirant's requirements, adding observations, and saving the result.
Actors	Human Talent
Extends	None
Preconditions	• An interview must have been scheduled with the aspirant.
Postconditions	
	<ul> <li>The interview is marked as complete in the system.</li> <li>Observations and results are stored for the aspirant's record.</li> </ul>
Flow	<ol> <li>Human Talent Staff navigates to the "Interviews" section.</li> <li>The HT Staff selects the scheduled interview they wish to register.</li> <li>The HT Staff reviews the aspirant's requirements (e.g., submitted documents, qualifications). And with the In real life interview.</li> <li>The HT Staff writes observations about the aspirant's performance and any relevant notes.</li> <li>The HT Staff saves the results of the interview, marking it as completed.</li> </ol>
Alternative Flow	None

Table 3.6: Use Case Documentation - (UC006) Register an Interview

Field	Description
ID	UC007
Name	Re-schedule an interview
Created by	Team 3
Updated by	Alex Vizuete
Date creation	12/01/25
Date last edition	12/01/25
Description	Human Talent Staff handles situations where the aspirant
	misses the interview or cannot attend. The interview can be
	re-scheduled, canceled, or removed as needed.
Actors	Human Talent
Extends	None
Preconditions	
	The interview must have been previously scheduled.
	The interview must have been previously seneduled.
Postconditions	
	• The interview is either re-scheduled, marked as can-
	celed, or deleted from the system.
	• The aspirant is notified about the change via email.
	8,,
Flow	1. Human Talent Staff navigates to the "Interviews" section.
	2. The HT Staff identifies the interview to be re-scheduled
	or canceled.
	3. The HT Staff selects the option to re-schedule or cancel
	the interview.
	4. If re-scheduling:
	a. The Staff selects a new date and time for the inter-
	view.
	b. The Staff notifies the aspirant about the new sched-
	ule.
	5. If canceling:
	b. The interview is marked as canceled or removed from
	the system.
	6. The changes are saved in the system.
Alternative Flow	3a. The Staff decides to delete the interview entirely:
	a. The interview is removed from the system.
	b. The aspirant is notified about the removal.

Table 3.7: Use Case Documentation - (UC007) Re-schedule an Interview

Field	Description
ID	UC008
Name	Select Best Aspirants
Created by	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	12/01/25
Date last edition	12/01/25
Description	Human Talent Staff selects the best aspirants based on in-
	terview results and the aspirant's profile, making sure they
	meet the requirements for the position.
Actors	Human Talent
Extends	None
Preconditions	
	• Aspirants must have completed their interviews.
	• The interview results must be available and recorded.
	• The aspirant's profile should meet the minimum requirements of the project.
Postconditions	
T OSCIONATIONS	• The best aspirants are selected based on their interview results and profile compatibility.
	• The selected aspirants are notified about their selection.
Flow	<ol> <li>Human Talent Staff navigates to the "Aspirants accepted" section.</li> <li>The Staff reviews the list of aspirants who completed the interview.</li> </ol>
	<ul><li>3. The Staff compares the interview results and the aspirant's profile with the requirements for the position.</li><li>4. Based on the comparison, the Staff selects the best aspirants that meet the criteria.</li></ul>
	<ul><li>5. The selected aspirants are notified by email about their selection.</li><li>6. The selected aspirants are marked in the system as cho-</li></ul>
41.	sen for the next steps.
Alternative Flow	3a. If no aspirants meet the requirements:  a. Human Talent can decide to keep the search open for more aspirants or re-evaluate other candidates.

Table 3.8: Use Case Documentation - (UC008) Select Best Aspirants

Field	Description
ID	UC009
Title	Request Additional Information
Author	José Ramos
Updated by	José Ramos
Date creation	16/12/24
Date last edition	12/01/2025
Description	Human Talent must ask the applicant for additional infor-
	mation required to continue with the hiring flow.
Actors	Human Talent
Extends/Includes	Send notification
Preconditions	
	• The applicant must pass the interview successfully.
Postconditions	• The applicant receives the notification and must send the required documents to the Human Talent staff.
Flow	1. Human Talent logs in.
	2. Human Talent goes to the "Recruitment Forms" section.
	3. Human Talent selects the project they want to review.
	4. Human Talent selects one of the aspirants.
	5. Human Talent checks the correct documents with the
	checkbox.
	6. Human Talent presses the button to send the review.
	7. Human Talent writes a comment where they ask for the
	required documents.
	8. Human Talent sends the notification to the aspirants.
Alternative Flow	None

Table 3.9: Use Case Documentation - (UC009) Request Additional Information

Field	Description
ID	UC010
Title	Generate Contracting Document
Author	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	29/12/24
Date last edition	12/01/2025
Description	Human Talent uses the Recruitment Forms from the previous use case and a pre-created Word document template to generate a contracting document by merging the form data with the template. The corresponding data will be matched with placeholders in the Word document.
Actors	Human Talent
Extends/Includes	None
Preconditions	• The applicant must have successfully passed the interview.
	• The required documents must have been received and reviewed.
	• A pre-created Word template for the contracting document exists.
Postconditions	
	<ul> <li>A contracting document is generated with the applicant's data from the Recruitment Form.</li> <li>The generated document is saved and can be sent to</li> </ul>
	the aspirant.
Flow	1. Human Talent logs in.
	2. Human Talent goes to the "Generación de documentos" section.
	<ul><li>3. Human Talent selects the recruitment form of the applicant they wish to generate the document for.</li><li>4. Human Talent uploads the pre-created Word document</li></ul>
	template. 5. Human Talent matches the corresponding fields in the form to the placeholders in the Word template.
	6. Human Talent generates the document by merging the form data with the template.
	<ul><li>7. Human Talent reviews the generated document.</li><li>8. Human Talent saves the document for future use or sends</li><li>it to the applicant</li></ul>
Alternative Flow	it to the applicant.
Antennative Flow	• If an error occurs while merging the form data with the template, Human Talent can attempt the process again or manually resolve the issue.

Table 3.10: Use Case Documentation - (UC010) Generate Contracting Document

Field	Description
ID	UC011
Title	Send Contracting Document to aspirant
Author	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	29/12/24
Date last edition	12/01/2025
Description	Human Talent sends the generated contracting documents
	to the aspirant for his/her esign.
Actors	Human Talent
Extends/Includes	None
Preconditions	
	• The contracting document must have been generated and reviewed.
Postconditions	• The applicant receives the document ready for esigning.
Flow	1. Human Talent logs in.
	2. Human Talent goes to the "Generación de documentos"
	section.
	3. Human Talent selects the aspirant with the document to
	be sent.
	4. Human Talent clicks to send to aspirant.
	5. Human Talent sends the document.
Alternative Flow	None

Table 3.11: Use Case Documentation - (UC011) Send Contracting Document to a spirant

Field	Description
ID	UC012
Title	Send Contracting Documents to Manager
Author	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	29/12/24
Date last edition	12/01/2025
Description	Human Talent sends the generated contracting documents
	for multiple applicants to the manager for review.
Actors	Human Talent
Extends/Includes	None
Preconditions	
	The contracting documents must have been generated and reviewed for the applicants.
Postconditions	• The manager receives the documents for review and final approval.
Flow	1. Human Talent logs in.
	2. Human Talent goes to the "Generación de documentos" section.
	3. Human Talent selects the applicants whose documents need to be sent.
	4. Human Talent clicks the option to send selected docu-
	ments to the manager.
	5. Verify the esign of the aspirant.
	6. Human Talent sends the documents. If they are correctly esigned.
Alternative Flow	5a. The esign it's incorrect.
THUCHAUIVE FIOW	1. Human talent asks the aspirant to e-sign again.
	1. Haman varent asks the aspirant to c-sign again.

Table 3.12: Use Case Documentation - (UC012) Send Contracting Documents to Manager

Field	Description
ID	UC013
Title	E-sign Contract Documents
Author	Diego Flores
Updated by	Diego Flores
Date creation	23/12/24
Date last edition	12/1/25
Description	After the aspirant sends the personal data requested by human talent, they need to sign the respective contract to complete the hiring process.
Actors	Aspirant
Extends/Includes	None
Preconditions	• The aspirant submits preliminary documents (resume and ID copy).
	• Human Resources approves the preliminary documents and schedules an interview.
	• The aspirant must have attended the interview.
	• The aspirant must be accepted by Human Resources during the candidate acceptance process.
	• The aspirant submits the required documents that are requested.
	Human Resources ensures the validity of the submitted documents.
	• The aspirant is notified to sign the contract to complete the hiring process.
Postconditions	
	• The aspirant is notified that they have been hired for the project they initially applied for.
Flow	<ol> <li>The aspirant gets notified to sign the contract through the app.</li> <li>The aspirant logs into their account.</li> <li>The aspirant goes to the contract module.</li> <li>The aspirant selects the contract assigned by Human Talent.</li> <li>The aspirant signs the contract.</li> </ol>
Alternative Flow	<ol> <li>If the user forgets to sign the contract:</li> <li>Five days after Human Talent has sent the contract, the aspirant is notified again to sign it.</li> </ol>

Table 3.13: Use Case Documentation - (UC013) E-sign Contract Documents

Field	Description
ID	UC014
Title	View contracts
Author	Team 3
Updated by	Diego Flores
Date creation	16/12/24
Date last edition	16/12/24
Description	The manager through the mobile application will be able to
	find the applicants whose contracts are available to sign.
Actors	Manager
Extends	
	• Filter2
Preconditions	
	The manager must have logged into their account
	The manager mass have 1986ed mee their account
Postconditions	None
Flow	1. The manager logs into their account from the mobile
	application.
	2. The manager heads over to the "view contracts" module.
	3. The manager filters the applicant's contract to review the
	number of pending contracts to be signed.
Alternative Flow	
	• Filter applicant's contract by project.
	• Filter applicant's contract by Employment Relation-
	ship.

Table 3.14: Use Case Documentation - (UC014) View Contracts

Field	Description
ID	UC015
Title	View Projects
Author	José Ramos
Updated by	José Ramos
Date creation	13/01/25
Date last edition	16/01/25
Description	The manager or project director will be able to see all the
	projects he or she is associated with, along with their de-
	scription, staff, start and end dates, and project status.
Actors	Manager, Director
Extends	None
Preconditions	
	• The manager/director must have an account in the system and must have previously created projects.
Postconditions	
	• The manager/director ensures the flow of the application process for his projects and can act depending on the status of the project.
Flow	1. The manager/director enters the internal staff section.
	2. The manager/director selects the corresponding role from
	the options.
	3. The manager/director logs into the system with his cre-
	dentials.
	4. The manager/director selects the "my projects" section.
	5. The manager/director sees the list of projects he has pre-
	viously created to which he is linked.
Alternative Flow	None

Table 3.15: Use Case Documentation - (UC015) View Projects

Field	Description
ID	UC016
Title	See Project's Information
Author	Diego Flores
Updated by	Diego Flores
Date creation	08/01/25
Date last edition	08/01/25
Description	"See project's details" is a system feature that allows the project director to review details of his/her projects, such as the number of applicants hired and their personal data, and the job application status of those applicants who haven't been hired.
Actors	Project Director
Extends	Edit project
Preconditions	
	• The director must have selected a project that's displayed in the project's table list.
Postconditions	
	• The project director will be able to see detailed information about applicants and their job application status.
Flow	1. The director logs in to his/her account.
	<ul><li>2. The director clicks on "Mis proyectos."</li><li>3. The director clicks on any of the projects in the project's table list.</li></ul>
Alternative Flow	Project director edits a project:
	1. The director logs in to his/her account.
	2. The director clicks on "Mis proyectos."
	3. The director clicks on any of the projects in the project's table list.
	4. The director clicks on "Estado de perfiles."
	5. The director will be able to change the job project's details such as the project's name, description, and project duration. The director will also be able to add a new profile vacancy.
	Project director clicks on "Estado de perfiles":
	1. The director logs in to his/her account.
	2. The director clicks on "Mis proyectos."
	3. The director clicks on any of the projects in the project's table list.
	4. The director clicks on "Estado de perfiles."
	5. The project director will be able to review the details of the aspirants, including name, ID, and postulation status.

Table 3.16: Use Case Documentation - (UC016) See Project's Information

Field	Description
ID	UC017
Title	See Profiles
Author	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	16/01/25
Date last edition	16/01/25
Description	This feature allows the project manager or project director to filter applicants by project and view their application sta-
Α	tus for each profile.
Actors	Project Manager, Project Director
Extends	None
Preconditions	<ul> <li>The manager or project director must be logged into the system.</li> <li>The manager or project director must have at least one project with profiles and applicants associated.</li> </ul>
Postconditions	• The manager or project director will be able to filter applicants by project and review the status of their applications.
Flow	<ol> <li>The manager or project director logs into the system.</li> <li>The manager or project director navigates to the "Profiles" section.</li> <li>The manager or project director applies a filter to select the desired project.</li> <li>The system displays a list of applicants for the selected project.</li> <li>The manager or project director reviews the postulation status for each applicant profile (e.g., accepted, pending contract sign, completed).</li> </ol>
Alternative Flow	Filter applicants by status:  1. The manager or project director logs into the system.  2. The manager or project director navigates to the "Perfiles" section.  3. The manager or project director applies a filter to view applicants based on their application status (e.g., pending, accepted, rejected).

Table 3.17: Use Case Documentation - (UC017) See Profiles

#### 3.2 Use Cases - Mobile Module

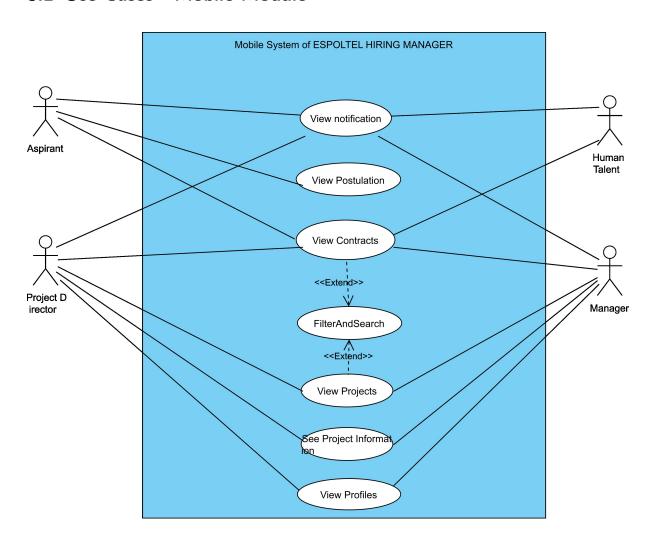


Figure 3.2: Mobile Module Use Cases Diagram of ESPOLTEL HIRING MANAGER

Field	Description
ID	UC018
Title	View Notifications on Mobile
Author	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	17/01/25
Date last edition	17/01/25
Description	This feature allows any user of ESPOLTEL HIRING MAN-
	AGER (Director, Aspirant, Manager, Human Talent) to re-
	ceive notifications on their mobile device about important
	updates regarding the hiring process and project manage-
A .	ment.
Actors	Director, Aspirant, Manager, Human Talent
Extends	None
Preconditions	
	• The user must have an account in the system.
	• The user must have a mobile device with the ESPOL-
	TEL HIRING MANAGER app installed.
	• The user must have enabled notifications for the app.
Postconditions	
	• The user will receive real-time notifications about rel-
	evant actions or updates in the hiring process and
	project status.
Flow	1. The user configures their mobile device to receive notifi-
1 10 W	cations from the ESPOLTEL HIRING MANAGER app.
	2. The system detects relevant events related to hiring or
	projects.
	3. The system sends a notification to the user's mobile de-
	vice, informing them about events such as:
	• A new candidate has been accepted or rejected.
	• A document has been requested or received.
	• A contract is ready for signature.
	• A project has an important update.
	• The status of an applicant's postulation has changed.
	4. The user receives the notification and can view additional details via the mobile app.
Alternative Flow	If the user has notifications disabled:
	1. The system will notify the user to enable notifications in
	their device settings.
	2. Once enabled, the user will begin receiving notifications
	as described in the main flow.

Table 3.18: Use Case Documentation - (UC018) Receive Notifications on Mobile

Field	Description
ID	UC019
Name	View application status on mobile
Created by	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	14/01/25
Date last edition	17/01/25
Description	The system allows the aspirant to view the status of their applica-
	tion (e.g., accepted, pending, rejected) for a specific project, using
	a unique code, optimized for mobile devices.
Actors	Aspirant
Extends	Nothing
Preconditions	The aspirant has an account created and is logged in, as well
	as the project code they are interested in. The system must be
	optimized for mobile use.
Postconditions	The aspirant will be able to see the status of their application for
	the selected project, with the unique code, on their mobile device.
Flow	1. The aspirant opens the ESPOLTEL HIRING MANAGER app
	on their mobile device.
	2. The aspirant enters their credentials in the login section.
	5. The system displays the status (e.g., accepted, pending, re-
	jected) of the profile they applied for, optimized for mobile view-
	ing.
Alternative Flow	There are no alternative flows.

Table 3.19: Use Case Documentation - (UC019) View Application Status on Mobile

Field	Description
ID	UC020
Title	View contracts on mobile
Author	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	16/12/24
Date last edition	16/12/24
Description	The manager, through the mobile application, will be able
	to find the applicants whose contracts are available to sign
	and review them easily on their mobile device.
Actors	Manager
Extends	
	• Filter
Preconditions	
	• The manager must have logged into their account on
	the mobile application.
	the mobile application.
Postconditions	None
Flow	1. The manager opens the ESPOLTEL HIRING MAN-
	AGER mobile application and logs into their account.
	2. The manager navigates to the "View contracts" module.
	3. The manager applies filters to view and review the appli-
	cants' contracts available to be signed on their mobile device.
Alternative Flow	
	• Filter applicants' contracts by project.
	The approal of contacts by project.
	• Filter applicants' contracts by Employment Relation-
	ship.

Table 3.20: Use Case Documentation - (UC020) View Contracts on Mobile

Field	Description
ID	UC021
Title	View Projects on Mobile
Author	José Ramos
Updated by	Jeremy Poveda
Date creation	13/01/25
Date last edition	16/01/25
Description	The manager or project director will be able to view all the
	projects they are associated with, along with their descrip-
	tions, staff, start and end dates, and project status, directly
	from their mobile device.
Actors	Manager, Director
Extends	None
Preconditions	
	• The manager or director must have an account in the system and must have previously created projects.
Postconditions	
	• The manager or director will be able to monitor the
	application process for their projects and take neces-
	sary actions based on the project status, directly from
	their mobile device.
Flow	1. The manager or director opens the ESPOLTEL HIRING
	MANAGER mobile app.
	2. The manager or director navigates to the "My Projects"
	section.
	3. The manager or director logs into the system using their
	credentials.
	4. The system displays a list of projects that the manager
	or director is associated with, showing project descriptions,
	staff, start and end dates, and project status.
Alternative Flow	None

Table 3.21: Use Case Documentation - (UC021) View Projects on Mobile

Field	Description
ID	UC022
Title	See Project's Information on Mobile
Author	Diego Flores
Updated by	Diego Flores
Date creation	08/01/25
Date last edition	08/01/25
Description	"See project's details" is a system feature that allows the project director to review details of his/her projects from the mobile app, such as the number of applicants hired and their personal data, and the job application status of those applicants who haven't been hired.
Actors	Project Director
Extends	Edit project
Preconditions	• The director must have selected a project displayed in the project's list on the mobile app.
Postconditions	
	• The project director will be able to see detailed information about applicants and their job application status directly from their mobile device.
Flow	1. The director opens the mobile app and logs into their
	<ul><li>account.</li><li>2. The director navigates to the "My Projects" section in the app.</li><li>3. The director selects a project from the list of their projects displayed in the app.</li></ul>
Alternative Flow	Project director edits a project:
Atternative Flow	<ol> <li>Toject director edits a project:</li> <li>The director opens the mobile app and logs into their account.</li> <li>The director navigates to the "My Projects" section in</li> </ol>
	the app.
	3. The director selects a project from the list of their projects.
	4. The director taps on "Profile Status."
	5. The director can edit project details such as name, description, and project duration, and add new profile vacancies.
	Project director clicks on "Profile Status":
	1. The director opens the mobile app and logs into their account.
	2. The director navigates to the "My Projects" section.
	3. The director selects a project from the list.
	<ul><li>4. The director taps on "Profile Status."</li><li>5. The director can review the applicants' details including name, ID, and postulation status.</li></ul>

Table 3.22: Use Case Documentation - (UC022) See Project's Information on Mobile

Field	Description
ID	UC023
Title	See Profiles on Mobile
Author	Jeremy Poveda
Updated by	Jeremy Poveda
Date creation	16/01/25
Date last edition	16/01/25
Description	This feature allows the project manager or project director to filter applicants by project and view their application sta- tus for each profile directly from their mobile device.
Actors	Project Manager, Project Director
Extends	None
Preconditions	
T reconditions	<ul> <li>The manager or project director must be logged into the system via the mobile app.</li> <li>The manager or project director must have at least</li> </ul>
	one project with profiles and applicants associated.
Postconditions	
	• The manager or project director will be able to filter applicants by project and review the status of their applications directly from their mobile device.
Flow	1. The manager or project director opens the mobile app and logs into the system.
	2. The manager or project director navigates to the "Profiles" section in the app.
	3. The manager or project director applies a filter to select the desired project from the list.
	4. The system displays a list of applicants for the selected project.
	5. The manager or project director reviews the postulation status for each applicant profile (e.g., accepted, pending contract sign, completed).
Alternative Flow	Filter applicants by status on mobile:
	1. The manager or project director opens the mobile app
	and logs into the system.
	2. The manager or project director navigates to the "Per-files" section in the app.
	3. The manager or project director applies a filter to view applicants based on their application status (e.g., pending,
	accepted, rejected).

Table 3.23: Use Case Documentation - (UC023) See Profiles on Mobile

## 4 Behavior UML

# 5 Individual Contributions

Student's Names	Contributions
Jeremy Rodrigo Poveda Gorotiza	Project Scope, Introduction, User Stories, Creation of GitHub Repository, prototype: web application for director and managers
Diego Fernando Flores Rengifo	Non functional requirements both Web and Mobile Application, prototype in figma: Authentification module and aspirants Platform
José David Ramos Rios	Product Overview, Product Features, Module Featuring: Mobile App, First Preview of Module Featuring: Web Application, and prototype in figma of Mobile App
Ariana Valentina Palacios Saenz	Revision, User Stories, and prototyping flows and module integration
Alex Javier Vizuete Pereira	Web Application Modules Breakdown, Mobile Application Modules Breakdown, prototype in figma: aspirants Platform, screens, and flow of postulation process

Table 5.1: Responsibilities of each member of team 3

## 6 Appendix

### 6.1 Appendix A: Github Repository

The versioning of the project prototype has been managed using Github. You can find it through the following link ESPOLTEL's versioning project: Repository link

### 6.2 Appendix B: Commitment Agreement