



# PROJECT PLAN

Advance Flow for LinkedIn Profile Interaction

Front-End

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**FONTYS UNIVERSITY OF APPLIED SCIENCE**

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<b>Project plan</b>	
Title	Front-end implementation of advanced LinkedIn profile interaction flow
Version	1.0
Date	25/09/2020

Approved and signed by the company tutor

Date: .....

Signature:

  
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## 1. Project Statement

### 1.1. About the company

LeadExpress is a start-up IT company which provides software solutions and online Marketing to its clients. In general, LeadExpress is creating software products in the Marketing field for both end users and business to business (B2B). Company is founded by Glenn Miseroy, Stefan Smulders and Aad van Vendeloo and located in Eindhoven, The Netherlands.

Currently 25 people are working for LeadExpress and are split between 3 departments – Development, Marketing, Support. Due to the Corona virus situation half of the company is working in the office and rest are from home. There are team building events in small groups which help colleagues get to know each other better.

LeadExpress has few products, LeadExpress is marketing tool that generates leads one of which is the web-application cloud-based software named "Expandi" and its main purpose is LinkedIn account management tool.

LinkedIn is employment-oriented online service (social media) which is mainly used for professional networking. Employers post jobs and potential employees can apply. LinkedIn users can send connection requests, visit, and follow other users, endorse their skills, contact them after connection is established. In order to find appropriate audience, LinkedIn users can use specific type of search like Sales Navigator, Recruiter, Talent.

Reaching out users in LinkedIn manually, sending the connection request and entering customized message for each user (from a search), can be very time consuming. That is where Expandi comes handy. Expandi links with user's LinkedIn account and has access to their profile. Instead of reaching out every contact one by one, Expandi users can create a campaign, populate it with all users that want to be contacted, set welcome message which could be customized for each user based on Name, Working place, Working position etc. If contacts accept the connection request it is possible to set up a follow-up message in order to encourage contacts to start conversation. After setting the campaign, Expandi user does not need to check each request or message, which leads to an automated process. The only thing the user should take care of is when contacts reply, he/she needs to answer back since a conversation is already started.

### 1.2. Organization

#### Company tutor

LeadExpress takes responsibility in my internship assignment. Martin Savov, front-end developer, is going to be my internship assignment tutor.

#### **Contact information**

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Working time: 08:30-17:30

#### University tutor

Mrs. Pesic is going to be my university tutor from Fontys University of Applied Science for my internship assignment

#### **Contact Information**

Maja Pesic  
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#### Project Leader

Plamen Zaykov, student at Fontys University of Applied Science and intern in LeadExpress is going to be the project leader.

#### **Contact information**

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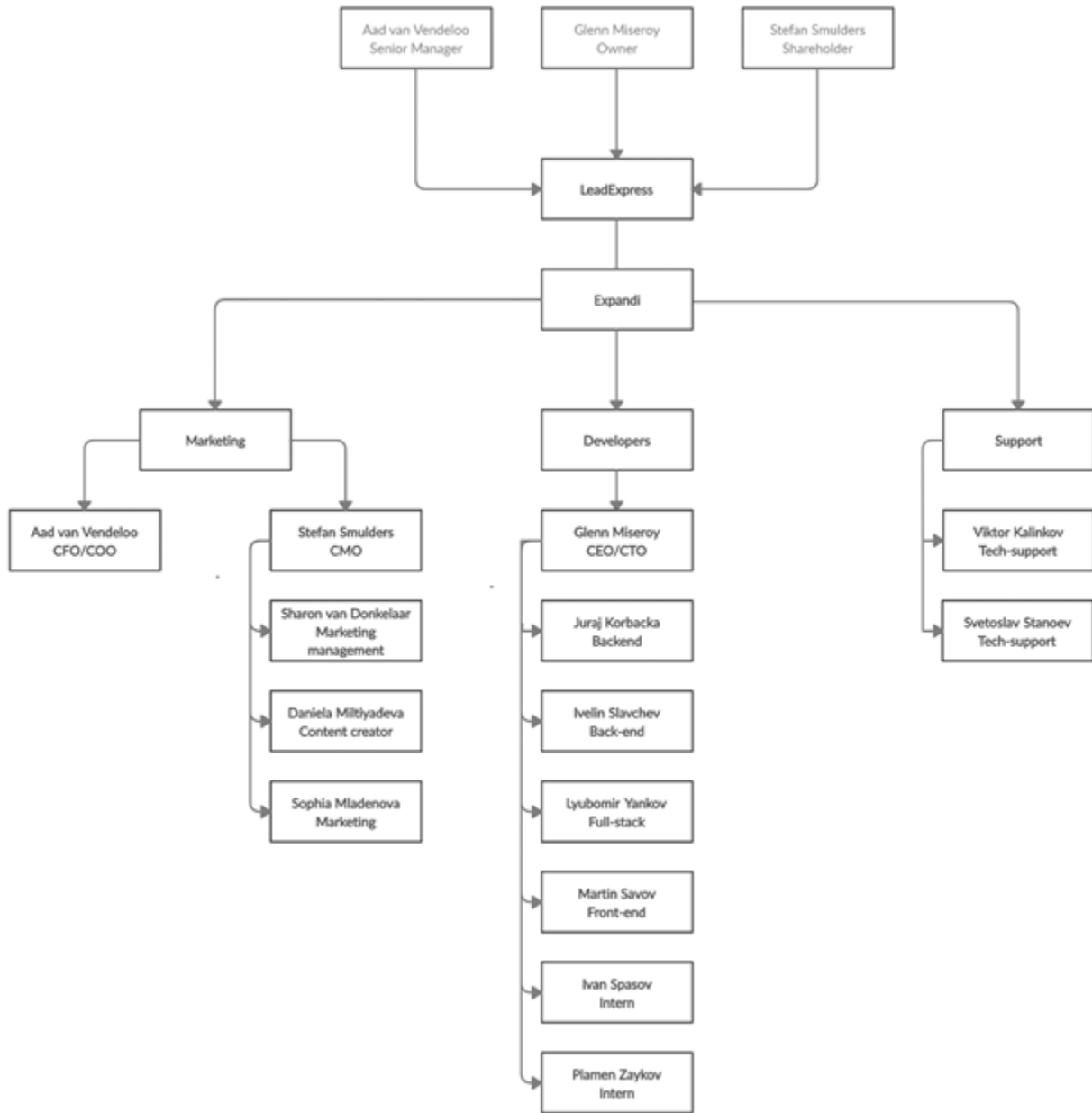


Figure 1 Organizational structure of LeadExpress

### 1.3.Current situation

LeadExpress has created a product named Expandi which is an automation system for contacting people through LinkedIn. Expandi provides its users with the opportunity to contact many LinkedIn users easier and faster by the so-called campaigns. Expandi users can choose between connector and messenger campaigns. Connector campaigns allow users to specify a list of people who they want to get in contact with. That list should be with people who are 2<sup>nd</sup> or 3<sup>rd</sup> degree connection (people with who are not connected with) in their

LinkedIn network. Messenger campaign provides chance for Expandi user to send messages to people who you are already connected with (1<sup>st</sup> degree). This type of campaign is usually used for advertising events and opening new conversations with Expandi user's contact. Both type of campaigns offers users to reach larger group of people in LinkedIn with spending less time which can be spent in generating new marketing strategy for example.

There are few sources through which campaigns can be populated with people. LinkedIn offers Sales Navigator, Recruiter, Talent and normal (Basic) search, which are all supported by Expandi. Users can also create their own CSV list of LinkedIn leads and upload it to Expandi

#### 1.4.Problem description

The current profile interaction flow is limited to the following feature: send connection request, attach a message to the request and send additional follow-up messages to contacts after they accept the connection request. Recently, many Expandi users noticed that their acceptance rate has decreased significantly and one reason for this decrease is that more and more LinkedIn users start recognizing that messages they receive could be send from an automated tool, so they have no interest in conversation with such profiles.

Expandi users are not happy with the low acceptance rate and most are willing to cancel their subscription. That leads to less customers and less profit for LeadExpress

#### 1.5.Project justification

LeadExpress needs an upgraded version of the campaign flow for Expandi in order to attract new customers and not lose old clients because of the specified problem in the previous chapter. In order to increase the acceptance rate of Expandi users, new features are needed which will imitate the human behaviour in LinkedIn network. Such can be visiting contacts profile, following it and endorsing a skill. This is what usually people are doing while surfing LinkedIn. If such features are implemented in addition to the current Expandi flow, LinkedIn users will not think that automated software is trying to contact them and the acceptance rate/done deals of Expandi users will increase. Having a high acceptance rate will once again bring new customers to Expandi and the old ones will be happy with their campaign results. More Expandi customers means more profit for LeadExpress and happy stakeholders.

#### 1.6.Project goals

The goal of this assignment is to create and implement a design for the advance flow of the campaigns which follows the current model of Expandi's front-end.

Perfect interaction flow of a campaign will have the following structure: Visiting the contacts profile, wait for the contact to visit you profile back, Follow his LinkedIn profile and wait for him to follow back, Send a connection request, when the contact has accepted send him/her a follow up message and endorse one of his/hers skills. This flow is pretty

much similar to what a real LinkedIn user would do when trying to contact another user. Having such advance flow will allow Expandi users to connect with more people, contact them and make deals, create friends or whatever their intentions are.

All new features require their own implementation and design which should be self-explanatory and should allow Expandi users to easily navigate through them without external support.

### 1.7. Project product

The project product will be the designing and implementation of the advanced flow in the campaign sector. The advance flow contains the following steps and triggers:

Steps:

- Visiting profile
- Follow contact
- Send connection request
- Follow-up message
- Skill endorsement

Triggers:

- Wait for contact to visit profile back
- Wait for contact to follow back
- Wait for contact to endorse skill back

### 1.8. Project deliverables

The Deliverable and non-deliverables of this project are summarized in the following table:

Deliverables	
Software	Design (Wireframes) of all steps/triggers
	Source code of front-end implementation
Documentation	Project Plan
	Project Report
	Day declaration form
Non-deliverables	
	Design document
	User requirements specification document
	Guidance on how to proceed with the flow

### 1.9. Project constraints

Constraint 1: Time

The project goal should be reached within 20 weeks (1 semester - duration of internship).



### Constraint 2: Software tools

Expandi is created with the use of Angular (front-end framework) and Fuse Admin-Wrap theme. Since a specific theme is followed, I need to design accordingly to the theme. Also, the backend implementation is done, so I need to use the already created end-points. Currently, GIT is used as a version control system and the GitKraken tool is used to manage the GIT based repository.

### Constraint 3: Scope

Having an already defined assignment creates a scope I need to strictly follow; any additional tasks could lead to a delay in finishing and submitting my deliverables.

### Constraint 4: LAW

Due to the fact I will be working with a real system and real clients I need to follow the General Data Protection Regulation (GDPR), all content of the project and client information will be handled with care and responsibility.

## 1.10. Project Risks

During the development process some problems may occur. The table below will show what the problems could be, their impact on the project and what prevention measures are needed.

No	Description	Impact	Probability	Prevention	How to deal
1	Task not completed on time	High	Low	Keep regularly track on the progress if deadlines are followed	Contact company/university tutor to inform about the problem
2	CEO rejects solution	High	Low	First ask what the CEO needs and let him explain how he think it should be	Rebuild the implementation accordingly to the CEO feedback
3	Corrupted data	High	Low	Always save progress on GIT	Have a back-up version at a different hard-drive/cloud
4	Unexpected updates	Medium	Medium	Install updates in a safe environment (test branch)	Revert to the previously used version which had everything working

## 2. Methodology and phasing

### 2.1. Software development methodology and phasing

During my internship, a software development methodology is required to be used for easier management of the project. LeadExpress is using the Agile methodology – Scrum which helps teams work better together through experience.

Members should be self-organized while working on the current task, periodically reflect and improve based on what were the best and worst parts during the so-called “sprints”. Key part of the Scrum methodology is regularly receiving feedback from clients. That is possible because the sprints mentioned above are quite short – usually 2 weeks. At the beginning of the sprint the backlog of the product is checked, and certain tasks/features are chosen to be worked on during the sprint. At the end of that period a working product should be delivered to client/stakeholder for feedback. The main advantage of these sprints is that both clients and development teams are up to date with all activities and know what is expected from both sides.

Scrum meetings are performed on daily bases. During these short meetings, no more than 15 minutes, daily activities, progress, and problems are discussed between all members of the team.

### 2.2. Research questions

#### Main research question

How to create a business flow for the campaigns of Expandi which will achieve an advanced profile interaction flow, better user-experience, and higher acceptance rate to the clients of Expandi.

#### Research sub-questions

- What is Expandi?
  - Goal: Learn what does the software product Expandi offer to its clients
  - Library
- What is the current business flow?
  - Goal: Learn how clients interact with the current LinkedIn profile interaction
  - Library, Field
- What are the campaigns of Expandi for?
  - Goal: Learn about the main feature of Expandi
  - Library
- What technology is currently used for the front-end?
  - Goal: Research the framework used for the front-end implementation of Expandi so far.
  - Library

- What is used for the back end implementation?
  - Goal: Research the technology used for the implementation of the back-end work-flow
  - Field, Library
- Research the sequence of Expandi profile interaction flow
  - Goal: Understand from where the work-flow begins, what are the middle steps and where it finishes
  - Field
- Research the sequence of LinkedIn profile interaction flow
  - Goal: Find what is the current LinkedIn interaction flow offered by Expandi
  - Field, Library
- Research what should be the advanced profile interaction flow
  - Goal: Find out what improvements will be made on the current flow
  - Field, Library
- What are the best UX design practices?
  - Goal: Find what is trendy for similar features
  - Workshop, Lab
- Research how each step/trigger can be implemented in Angular.
  - Goal: Come up with a solution on what is the best way to implement such features in an Angular application
  - Workshop, Library
- Which design pattern is best suitable to implement for steps/triggers
  - Goal: Search if design patterns will be suitable for such features and implement if an appropriate design pattern is found
  - Library, Workshop
- How fields from Angular can be connected with the back-end end points
  - Goal: Find a solution on how Angular fields are connected to Django end-points
  - Library, Workshop
- Would animations create a better user-experience of the flow?
  - Goal: Research if animation would be help for easier and better UX when steps/triggers are added or removed
  - Library, Field
- What are the best software tools for testing Angular code?
  - Goal: Find a library which tests fast and reliable Angular code
  - Library, Workshop
- What are Expandi clients experiencing with the new flow?
  - Goal: Check if clients are happy with the new flow based on their feedback

- Lab, Field

### 2.3. Research methodology

The research methodology for this project will be the DOT (Development Oriented Triangulation) research framework. The main advantage of this framework is that helps structuring the research and communicate about it. The framework consists of three levels:

- The “What” of the research (the domains)
- The “Why” of the research (the trade-offs)
- The “How” of the research (the strategies and methods)

## 3. Management plan

### 3.1. Phasing

The project will take place from 31.08.2020 to 22.01.2021. The whole process will be divided between sprints of 2 weeks each. The initial sprint will take 5 days, while all other sprints will be 10 days each.

Stage	Start / End Date	Activity	Questions
Initial	31.08.2020 / 01.09.2020	Interview a developer	What is Expandi?
	02.09.2020 / 04.09.2020	Read documentation/articles of Expandi	What are the campaigns of Expandi for?
Sprint 1	07.09.2020 / 08.09.2020	Explore the sequence of business flow	What is the current business flow?
	09.09.2020 / 10.09.2020	Create an Expandi account and explore flow	
	11.09.2020 / 15.09.2020	Explore current Angular front-end	What technology is currently used for the front-end?
	16.09.2020 / 18.09.2020	Reproduce the tour-of-heroes tutorial that Angular provides to refresh Angular skills	
Sprint 2	21.09.2020 /	Explore Fuse Theme	What is the Angular theme

	29.09.2020		used for the front-end?
		Explore Django Rest and Swagger	What is used for the back-end implementation?
		Start writing report	Report
	30.09.2020 / 02.10.2020	Read documentation of the back-end implementation for the advanced flow	What are the already provided end-points for the advanced flow?
Sprint 3	05.10.2020 / 09.10.2020	Explore back-end code and run local version of Swagger with all end-points	What are the already provided end-points for the advanced flow?
	12.10.2020 / 13.10.2020	Create Connector and Messenger campaign to learn how the interaction flow works	Research the sequence of Expandi profile interaction flow.
	14.10.2020 / 16.10.2020	Explore LinkedIn to see what profile interaction they offer to their clients	Research the sequence of LinkedIn profile interaction flow
Sprint 4	19.10.2020 / 23.10.2020	Research what are the current trends in the UX design	What are the best UX design practices?
	26.10.2020 / 30.10.2020	Create different versions of wireframes and ask for feedback	Research how the design of the advanced profile interaction flow should look like.
		Submit first half of report	Report
Sprint 5	02.11.2020 / 06.11.2020	Create components for each step/trigger and start implementing based on wireframes	Research how each step/trigger can be implemented in Angular.

	09.11.2020 / 13.11.2020	Research the most suitable design pattern for similar content and different functionality	Which design pattern is best suitable to implement for steps/triggers
Sprint 6	16.11.2020 / 20.11.2020	Research what is the best way to connect Angular input with Django end-points	How fields from Angular can be connected with the back-end end points
		Read documentation for Angular services	
	23.11.2020 / 27.11.2020	Research how animations are implemented	Would animations create a better user-experience of the flow?
		Create a survey for clients and ask for opinion	
Sprint 7	30.11.2020 / 04.12.2020	Create an intercom survey, so clients can choose	Which version of steps/triggers are preferred by clients?
	07.12.2020 / 11.12.2020	Review best practices in testing Angular framework code	What are the best software tools for testing Angular code?
Sprint 8	14.12.2020 / 18.12.2020	Read Jasmine testing guidelines and JavaScript Unit Testing book	What are the best software tools for testing Angular code?

		Submit report for final feedback	Report
	04.01.2021 / 08.01.2021	Create unit tests for steps/triggers	What are the best software tools for testing Angular code?
Sprint 9	11.01.2021 / 15.01.2021	Put the advanced flow in live production	What are Expandi clients experiencing with the new flow?
		Submit final version of report	Report
	18.01.2021 / 22.01.2021	Check intercom periodically to see what are the common questions for the advanced flow	What are Expandi clients experiencing with the new flow?
		Summarize results and draw conclusions based on the received feedback	

### 3.2.Required skills

Completing the project required certain skills, both in programming and communication field:

- Knowledge in Angular front-end framework
- Knowledge in Fuse Angular theme
- Understanding back-end endpoints (Swagger)
- Familiar with LinkedIn profile interaction flow
- Soft skills for communication with company and university tutor
- Analysis and communication skills for interviewing CEO and clients

### 3.3. Quality

The final product of the project depends on the quality of the code I am writing for the advanced flow. However, each sprint must start and end on time and all functionalities should be finished within the sprint, because delay between features could be affecting the final result. The quality of the code is very important because it will be used in the future by other people and it should be understandable and easily manageable.

### 3.4. MOSCOW

Features	Must	Should	Could	Won't
Wireframes for the advanced flow	X			
Create visiting contact step	X			
Create visiting contact trigger	X			
Create follow contact step	X			
Create follow contact trigger	X			
Create follow up messages step	X			
Create send connection request step	X			
Create skill endorsement step	X			
Create skill endorsement trigger	X			
Assign all functional parts to the back-end endpoints	X			
Add animations when switching between actions		X		
Interview clients and CEO		X		
Unit tests			X	

## 4. Appendix

### 4.1. Contacts

Name	Role	Email	Phone
Martin Savov	Company tutor	<a href="mailto:mataharata@gmail.com">mataharata@gmail.com</a>	+359 88 468 6478
Maja Pesic	University tutor	m.pesic@fontys.nl	0885084294
Plamen Zaykov	Intern	p.zaykov@student.fontys.nl	+31626898451

### 4.2. Communication plan

The communication between the intern, university tutor and company tutor are shown in the table below:



From whom to whom	Purpose of communication	Type of communication	How often
Intern to Company tutor	Request help about company information or code	Skype, meetings	Daily
Intern to University tutor	Request feedback on progress and documentation	Email, company visit, online meetings	Every 2 (two) weeks