

Vision Document

Topic: Language school

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1. The organization acquiring the IT system

1.1. Name of the organization : Linguś

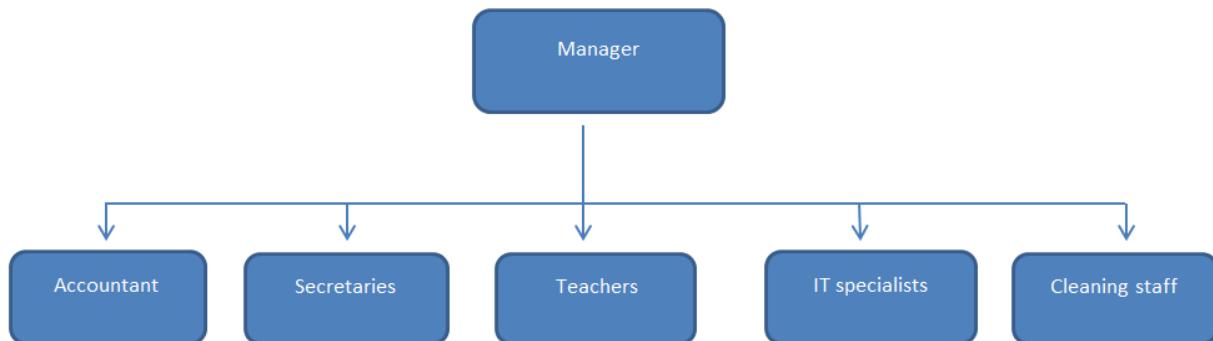
1.2. Description of the organization

Linguś is a language school located in Gdańsk. The aim of the school is to effectively help in acquiring and developing language skills at various levels of advancement. Linguś provides classes for children (6-17 years old) and adults. School organizes individual and group lessons according to the students' age and their level of advancement. The school reaches students mostly from Gdańsk and surrounding areas. It has 6 departments, one for each language: English, Spanish, French, German, Chinese and Korean. Company consists of 28 employees: 20 language tutors, manager, accountant, 2 secretaries, 2 IT specialists and 2 cleaning ladies. Linguś has 400 pupils. School cooperates with bookstores including Bookland, Bookstore, and Polanglo. In the next few years the school is planning to open a new department for Norwegian, hire more teachers and also gain new students. Moreover, the goal is to provide better quality of education, using modern technology and well-trained teachers.

<Description of the organization (or its part e.g. division), where the IT system is planned to be introduced. The description should include main processes/activities conducted by organization, numbers (employees, customers etc.), scale of enterprise (city, province, country, Europe, worldwide), relationships with other organizations, plans and perspectives for the next few years.>

1.3. Organizational structure

A diagram showing the organizational structure org. (insert figure):



Responsibility of the organizational units:

Organizational unit	Responsibilities
teachers	Organizing classes as well as for individual students and groups. Providing all the essential information about the tutorials..
manager	Leading and controlling the team. Planning the company's destination, goals for the future. Gaining new stakeholders, participation in business meetings. Delegation of responsibilities and communication with all organizational units.
accountant	Helping company to make crucial financial decisions by collecting, tracking, and correcting the company's finances. Being responsible for financial audits, reconciling bank statements, and ensuring financial records are accurate throughout the year.

secretaries	Enrolling new students, providing all information about the courses, supervising payments, managing all emails, letters, correspondence, record keeping, sending reminders about payments if there are any delays or mistakes (underpayments or overpayments)
IT specialists	Supervising hardware and software of currently existing webpage. Helping teachers with technical tools.
cleaning staff	Taking care of the cleanliness of utility rooms.

1.4. Problems occurring within the organization:

<Problems which are currently encountered and can potentially be eliminated or reduced by introducing an IT system.>

- P1 Bad student-teacher information flow - the only way of communication between students and teachers is via private emails. Some of the students are not reading their messages regularly and do not keep up with the changes
- P2 Problems with calling off or shifting tutorials - the students can not write directly to the teachers in order to shift or cancel the classes. Every change must be firstly reported to the secretariat, which consults them with the tutors later
- P3 Hindrance with counting hours of completed courses - students have to remember about their absences and additional lessons in order to count the total number of conducted lessons for each month
- P4 Trouble with outstanding bills - students do not receive reminders about their payments until they make a mistake (e.g under/over payments) or they do not pay in time.
- P5 Lack of accessible information for students about the covered material, homeworks etc. - teachers having problems with handling students which are unable to catch up with covered material because of their earlier absences.

1.5. Generic concept of an IT system

<What IT system is anticipated? – Just a main idea, no details.>

Our system is destined for all teachers and students in Lingus. Software is designed to help tutors and their pupils to organize their timetables in a convenient way. It displays an interactive schedule on a website with all information connected with classes. Platform informs students about any events, homeworks and material covered during classes. Teachers can cancel/move lessons or give replacement via platform, as well as students can call off individual classes, or inform about their absence during group lessons. The other functionality which our software provides is an ability to make transfers via our platform. The website enables exporting the data to an external accounting system.

2. System goals

< System goals – benefits and improvements that are expected after introducing the system. For each goal the explicit criteria allowing to verify whether the goal was met should be defined. The criteria should include measure(s) representing the goal and level(s) to be achieved. If a goal is related to a problem occurring in the organization (from section 1) – the ID of such problem should be provided.>

Goal	Problem ID (optional)	Criteria (measures, levels)
Increasing the number of students.		By 20% till the end of the next year in comparison to the previous.
Improving student-teacher level of communication	P1	Increase of “satisfied” students by 10% in a questionnaire survey conducted half of the year after introducing the new IT system.
New business partners		Acquiring 2 relevant business partners: University of Gdansk and Empik by the end of 2023.
Increasing the profit		By 10% till the end of the next year in comparison to the previous one.

Facilitation in shifting or canceling tutorials for students	P2	Increase of “satisfied” students by 10% in a questionnaire survey conducted half of the year after introducing the new IT system.
Decreasing the number of incorrect payments	P3	Decrease the number of incorrect payments made by students by 12% by the end of 2023
Decreasing the number of students’ outstanding bills	P4	Decrease the number of delayed payments made by students by 15% by the end of 2023
Providing accessible information about the homework, covered materials etc. for students	P5	Manager supervises the work of the teachers on the platform, checking if all necessary information for the students are uploaded

3. Stakeholders

<Stakeholders of the system and their viewpoints (general expectations regarding the system, hopes, concerns, fears etc., but without detailed requirements about e.g. functionality!). Please note that stakeholders are not only system users, but also other parties that are sources of requirements (including non-humans like other IT systems or law regulations).>

Stakeholder	Viewpoint
students	Students expect that introduction of the new IT system will improve and facilitate the communication with the tutors and enable the view in the updated schedule. They are looking forward to the opportunity of being able to make changes like canceling or shifting individual classes. Pupils require to be able to check and catch up on covered material during classes. Students also demand for the new software to save time and be more convenient than the traditional approach.

teachers	Teachers expect that introduction of the new IT system will help them in organizing their classes. They anticipate having the possibility of modifying the timetable in case of illness or other reasons to shift or cancel lessons. They are looking forward to the opportunity of being able to organize a replacement. Tutors expect that the new IT system will save their time and be more convenient in usage. They are afraid of canceling lectures by students at the last moment.
Parents of the underaged students	Parents expect that introduction of the new IT system will give them more control over their children. They want the system to help them with checking covered material, what the homework was and other organizational issues. They require contact with teachers via platform. They are afraid of problems occurring during usage of the new technology.
Polanglo, Bookstore, Bookland	Polanglo, Bookstore and Bookland expect that the new IT system will gain new students to the Lingus and therefore the number of their clients will increase. They require the newly developed system to show the advertisements of their companies.
accountant	Accountant expects that introduction of the new IT system will facilitate and shorten his work. He looks forward to the opportunity of being able to directly collect the data about undergone hours of each employee (including extra classes).
secretaries	Secretaries expect the system to support them in their routine tasks. They want the system to send the remainders about the payments to the student, so they will not have to do it via phone. Secretaries are concerned that the new system will reduce the number of their working hours.

manager	Manager wants the system to help his team to ease their work and be more efficient. He wants to monitor the organization of uploaded materials to the platform. He expects the system to facilitate gaining new stakeholders, due the visibility of advertisements via the website. He has a strong interest in new technologies to move with the times to gain new clients.
IT specialists	IT specialists expect that the new developed system will be intuitive and easy to use in order to mitigate reported problems by the other users in Lingus.
accounting system	From accounting system's point of view the developed system is required to export XML files.
online payment service	From online payment service's point of view the developed system is required to synchronize with online payment system at specific time slots.

4. System's context

4.1. System users and their characteristics

<A separate table row for each user, please add the necessary number of rows.>

User	Characteristics	
Student	Profile [1]	Generally, students are able to intuitively use a platform, but not everyone. Some of them require a short introduction on how to use the software.
	Conditions of use [2]	Mostly at home; on their own devices like computer, laptop or smartphone; wide access to their schedule
	User interface requirements [3]	built-in help as a self-teaching textbook on the website; undo options; easy navigation

Parents of underaged students	Profile	Most of the parents are capable of using a platform with some exceptions.
	Conditions of use	Mostly at home on their own devices (computers, smartphones, etc.). wide access to the schedule of their children
	User interface requirements	built-in help as a self-teaching textbook on the website; undo options; easy navigation
Teachers	Profile	Teachers may have some difficulties with using a platform at the beginning.
	Conditions of use	Mostly during work hours at the classrooms; wide access to their schedule; avoidance of errors;
	User interface requirements	built-in help as a self-teaching textbook on the website; checks to avoid mistakes; undo options; simple interface;
Secretaries	Profile	Secretaries are familiar with IT systems, they are capable of using software with little explanation at the beginning
	Conditions of use	Mostly during work hours, in office environment; avoidance of errors; ability to search through students and teachers data
	User interface requirements	checks to avoid mistakes; undo options; easy navigation
Manager	Profile	Manager is familiarized with various types of IT systems and is able to learn quickly when any explanation is given.
	Conditions of use	Primarily office and its surroundings, in special occasions from other places like home or on the street; need to make decisions in real time
	User interface requirements	undo option; clear data presentation - purposeful layout; default settings; easy navigation

Accountant	Profile	Accountant is familiar with similar types of systems. Little explanation needed how to export data from the software to accounting system
	Conditions of use	Mostly during work hours, in office environment; avoidance of errors; ability to export data to the accounting system; accuracy;
	User interface requirements	default settings; clear data presentation - purposeful layout; checks to avoid mistakes;

4.2 External cooperating IT systems and their interfaces

Cooperating IT system	System's interface (provided / expected functions, transmitted data, technical means of cooperation e.g. API, web service, export/import)
online payment service	Website is connected with an online payment service. Payment can be done through software, automatically including the data, due to the fact that the amount of lesson hours is counted.
accounting system	The IT system is linked with the accounting system. Accountant can transfer the amount of hours for each teacher to his system. Deployed system exports files in XML formats and the accounting system is able to import them. It helps with counting the additional hours of work for each employee.

5. Functional requirements

<Functions grouped by users, provided with unique identifiers. For each functional requirement, its priority (importance) should be determined as either: MUST (must be), SHOULD (should be), COULD (could be included if there is enough time and resources)>

User	Function	Priority
Teacher	F1.1 Enter homework for each classes in the schedule	MUST
	F1.2 Enter covered material for each classes in the schedule	MUST
	F1.3 Cancel lessons	SHOULD
	F1.4 Shift lessons	SHOULD
	F1.5 Enter additional classes	SHOULD
	F1.6 Read the messages from the students and the parents of underaged students	MUST
	F1.7 Create files for the lessons	WON'T
	F1.8 Write messages to the students and the parents of underaged students	SHOULD
	F1.9 Accept or refuse the changes in the timetable propose by the students or the parents of underaged students	COULD
Student	F2.1 Cancel lessons	SHOULD
	F2.2 Shift lessons	SHOULD
	F2.3 Enter additional classes	COULD
	F2.4 Write messages to the teachers	MUST
	F2.5 Read messages from the teachers	MUST
	F2.6 Insight into homework after every lesson	MUST

	F2.7 Insight into covered materials after every lesson	MUST
	F2.8 Option to make payments	MUST
Accountant	F3.1 Transfer the data about the completed working hours of each teacher from the website to the accounting system	MUST
Secretary	F4.1 Make timetables for teachers and students	MUST
	F4.2 Create accounts for students and teachers	MUST
	F4.3 Assign groups and individual students into classes	MUST
	F4.4 Access to payments done by students/parents	
Manager	F5.1 Insight into everything on a website and supervision over the work on the platform of teachers, secretaries and accountant	MUST
	F5.2 Updating advertisements on the website	MUST
	F5.3 Same functions as teachers, which are presented above.	SHOULD
	F5.4 Same functions as secretaries, which are presented above.	SHOULD

6. Quality requirements

<Requirements regarding quality attributes of the system. For each requirement, its priority (importance) should be specified using the following scale: MUST (must be), SHOULD (should be), COULD (could be included if there is enough time and resources) WON'T (is not required at all)>.

Attribute	Requirement regarding that attribute (expressed in a way that enables objective verification whether the system complies to such requirement)	Priority
performance	<p>The system shall allow the concurrent usage of 600 users without significant delays (max 2 seconds). We expect the change in number of users from 425 (this year) to above 500 in next year. We are planning to increase the allowed number of concurrent users to 750 by the end of 2023. System should operate on a data volume of 2 millions records with a yearly increase of 0.2 million of records.</p>	MUST
reliability	System has to be functioning without any overloads, bugs, abnormalities for 1 million visits on website	MUST
availability	The IT system must guarantee 97% availability during standard lecture hours (13-21). In the remaining hours the availability can be lower, but cannot be less than 92%.	MUST
security	No leakage of data is allowed. Payment transactions must be encrypted.	MUST
safety	No requirements	WON'T
portability	<p>System has to work with different devices (computers, tablets, smartphones) and with different operating systems like Linux, MacOS, Android and Windows. It is also crucial that websites can be displayed via particular browsers : Microsoft Edge (versions : 96.0.1054.72 up to 99.0.1146.0) , Google Chrome (versions: 106.0.5249, 107.0.5304, 108.0) , Mozilla Firefox (versions: 105.0, 105.03), Opera (versions: 50-76), Samsung Internet Browser (versions: 9.2 up to 19.0) , Safari (versions: 14.1.2, 15.6.1, 16).</p>	MUST

flexibility	Due to the fact that the system is planned to be enlarged, it must be easy to introduce new developments or expand currently existing ones. Software has to be able to expand into an e-learning platform, with further possibilities to conduct meetings online, and other processes remotely.	MUST
configurability	levels of advancement in english	MUST

7. Constraints

<Constraints that introduce some limitations with respect to the product (IT system) or the way the software project is conducted. If there are no constraints in a given category -please explicitly state „none”. >

Time: 4 months - 9.02.2023

Budget: 80 000 PLN

Specific conditions to be operated in: none

Specific equipment to be used on: none

Development technologies imposed by the customer: none

Specific data formats to be used: XML for transferring data to accounting system

Required documentation: none

Required trainings to be organized: trainings for teachers, accountant, manager and secretaries organized one day after the implementation of the software.

Required deployment arrangements: creating accounts for currently existing employees and students, implementation of timetables; most suitable to launch the system during the weekend to avoid fallacies

Product/development process compliance with specific standards: none

[1] Profile – user's ability of using IT systems, needs of help/support, limitations (impairments, language etc.)

[2] Conditions of use - specific conditions of using the system, the most important aspects of performed tasks

[3] User interface requirements - requirements concerning user interface (derived from profile and conditions of use!)