

## Vision Document

**Topic: Private Music School**

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### 1. The organization acquiring the IT system

1.1. Name of the organization

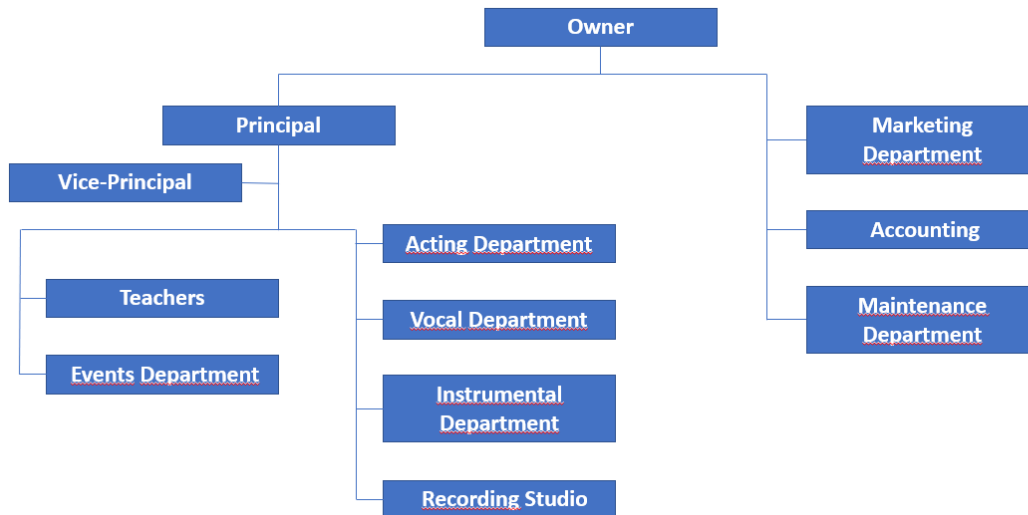
**“Visual Studio” Music School**

1.2. Description of the organization

This is private school teaching children in the age from 5 up to 18. Classes take place mostly in the afternoons and evenings. To participate in the classes each student have to pay monthly (price is dependent on the field of classes). When someone takes more than one field, he can get a discount. Students can change their plan each week after teacher’s consent, they can also choose new lessons. The organization is created to teach children how to play instruments, sing and act. There are 15 teachers, about 100 students and 10 administration workers. It is located in Gdańsk Wrzeszcz in Poland. They cooperate with many dance schools and community centres around the country organizing festivals and cultural events. Their main plan for the future is to expand activity to other cities.

1.3. Organizational structure

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



Responsibility of the organizational units:

Organizational unit	Responsibilities
<b>Principal of the School</b>	Approving decisions, representing school during events, hiring and firing employees, controlling work
<b>Vice-Principal</b>	creating schedules, representing departments, organising training for the teachers, organizing events
<b>Owner</b>	deciding about school's budget, deciding about expansion of the school
<b>Teachers</b>	teaching their students, preparing students for performances, giving students moral support, ensuring safety during classes
<b>Instrumental Department</b>	lending instrumental equipment to students, borrowing instrumental equipment from music shops and other agencies

<b>Vocal Department</b>	cooperating with concert halls, taking care for sound system during performances
<b>Acting Department</b>	cooperating with theatres, borrowing and lending costumes,
<b>Events Department</b>	organising plays and concerts, cooperating with vice-principal, finding concert halls
<b>Marketing Department</b>	promoting school and its events, ensuring good image of the school, finding sponsors
<b>Recording Studio</b>	operating studio's equipment, cooperating with Vocal Department, Instrumental Department and teachers
<b>Accounting</b>	managing payments, preparing balance sheets, making sure that there is enough money for the school to operate
<b>Maintenance Department</b>	scheduling cleaning of each class, checking the condition of school's equipment

#### 1.4. Problems occurring within the organization:

- **Problem 1** - managing classrooms-it is really difficult to make sure that for each class there is separate classroom and classes do not overlap, when lessons change every week (every student and teacher has his own new plan every week)
- **Problem 2** - deciding about the hours of the lectures - when students change their plan every week, there can occur problems with informing teachers about it and adjusting it in such way that classes do not overlap with the plan of other teachers
- **Problem 3** - communication between teachers and students - students or their parents have to call teachers for approval every time they want to reschedule student's classes and since there is no parent-teacher conferences meeting there is problem with giving feedback about child's progress or behavior

- **Problem 4** - with payments - parents have to come to the secretary's office every month to pay for classes, which is very bothersome
- **Problem 5** - lending instruments - every student has special requirements about his instrument, so sometimes there are a lot of mistakes about what instrument should be taken from the instrumental department

### 1.5. Generic concept of an IT system

**Virtual school register with schedules, messages from teachers, online rental place and system for payments.**

## 2. System goals

Goal	Criteria (measures, levels)
Ensuring easy access to schedule	increase an amount of students of school by 10% thanks to easy access to schedule of classes
Better and faster communication between teachers and students	spending 3h less per week by every teacher on calling to their students and fixing classes
Easy and fast payments	spending 6h less on managing payments by accounting department
Possibility to reserve instrument to rent via our system	increase in our profit by 3% because the fact that people from instrumental department have to work 10h less per week

### 3. Stakeholders

<b>Stakeholder</b>	<b>Viewpoint</b>
<b>Teachers</b>	Better communication with students - they can just write and do not have to call every time (less hours spent at work). They can easily check the classroom of their classes. Fear of making mistakes in new technological solution.
<b>Students</b>	Easily accessible schedule, easy way to rent instruments.
<b>Students' parents</b>	Easy way to pay for the classes, knowing where are their children. Fear of making mistakes with payments.
<b>Principal and Vice-Principal</b>	Sending messages to the whole community. Faster work and less hours spent over boring papers.
<b>Administration</b>	Receiving and managing payments. Faster, more satisfying and safer work.
<b>Owner</b>	Pride of his progressive and modern company.
<b>Instrumental department</b>	Less hours of work and less papers when borrowing instruments. Less stressful and more effective and precise work.
<b>Maintenance department</b>	Easy planning what should be cleaned in specified time (knowing which class is empty thanks to online schedule).

## 4. System's context and functionality

### 4.1. System users, their characteristics, functional requirements and functions

User	Characteristics		Functional requirements	Functions
Student	Profile	children with small ability to use the system, foreign students	REQ1 - children older than 15 years old can book classes (instrumental, acting, vocal) on their own	
	Conditions of use	using from home through their own computers and on the smartphones	REQ2 - children older than 15 years old can cancel already booked classes on their own  REQ3 - sending messages to the teachers about changes in the plan, grades, absences	
	User interface requirements	clear and easy to understand, english and polish version, errors displayed	REQ4 - insight into their plan to match free student's and teacher's hours  REQ5 - booking instruments, giving special requirements about what, how big instrument (there are different sizes of some instruments depending for example on age)	
Teachers	Profile	adult, with good understanding how to use a system	REQ6 - sending messages to students and their parents about the progress, changes in the plan, absences	
	Conditions of	from home on smartphone,	REQ7 - insight into their plan only each teacher's	

	use	during classes	classes	
	User interface requirements	clear and simple, polish and english version, errors displayed		
Principle and Vice-Principle	Profile	adult, with good understanding how to use a system	REQ8 - sending messages to teachers REQ9 - creating and updating schedule after analysing student's requests	...
	Conditions of use	on the school's computer or their private ones, on smartphone, from office		
	User interface requirements	clear and simple, polish and english version, errors displayed		
Students' parents	Profile	adults, with good understanding how to use a system	REQ10 - insight to child's schedule REQ11 - ability to send messages for example to administration about payments and to teachers	
	Conditions of use	easily accessible schedule, from home, on their own smartphones	REQ12 - ability to book instruments for their child having chosen the size and specifying for how long REQ13 - booking classes for children younger than 15 years old	
	User interface	clear and simple, polish and	REQ14 - canceling classes for their children if they are younger than 15 years old	

	requirements	english version, errors displayed		
Accounting	Profile	adults, with great understanding how to use a system	REQ15 - checking transactions of payments for lessons and lending instruments  REQ16 - ability to put data into the system (personal data, availability from teachers-free hours, prices)	
	Conditions of use	on the school's computer or their private ones, on smartphone, from office		
	User interface requirements	clear and simple, polish and english version,errors displayed, function of checksums		

#### 4.2 Priorities for Requirements

Requirement/ priority	MUST	SHOULD	COULD
REQ1		X	
REQ2		X	
REQ3	X		
REQ4		X	



REQ5		X	
REQ6	X		
REQ7		X	
REQ8	X		
REQ9	X		
REQ10		X	
REQ11			X
REQ12		X	
REQ13	X		
REQ14	X		
REQ15		X	
REQ16	X		

#### 4.3 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)
banking	possibility to pay for lessons via system

## 5. Quality requirements

Attribute	Requirement regarding that attribute (expressed in a way that enables objective verification whether the system complies to such requirement)	Priority
performance	system should be prepared for 500 users and respond in maximum 3s, operate on data of size of hundreds GB, in the future the system would be expanded to 1500 users	1
reliability	Checking requirements that identify checks to ensure that incorrect data is detected before it leads to a failure. Recovery requirements to help the system recover after a failure has occurred.	2
availability	system should be available off and online, some tasks (insight to the plan) can be done without internet connection (however some updates could not be shown) and others can't, it has to work during the whole week, mostly at the weekends, when parents or children make the plan for the whole week, downtime is acceptable during 3 /4 hours in the nights	2
security	no user's data will be sold or transferred outside the system, system will be immune to external attacks, it needs access control, antivirus software	1
safety	must include a personal data protection system, there are no more safety requirements because it is unable to cause dangerous accidents in their environment	1
portability	the system could be used on different devices (computers, phones, tablets), platforms-VULCAN,	4

	operating systems (Microsoft, Linux, Apple iOS), browsers (Chrome, Mozilla, Opera, Internet Explorer, Safari)	
flexibility	the system has to be easy for further development, must be prepared for more data to for example add new users and extend functionality	3
configurability	the ability to modify students' and teachers' data, number of bank bank accounts, VAT rates, account passwords, possibility to adding new users	2

## 6. Constraints

**Time:** 6 months

**Budget:** 80,000 zł

**Specific conditions to be operated in:** connection with the bank account

**Specific equipment to be used on:** None

**Development technologies imposed by the customer:** None

**Specific data formats to be used:** database/pdf

**Required documentation:** about the availability of teachers, about the number of available instruments, about an access to classrooms, about personal data of students/teachers

**Required trainings to be organized:** Teaching users how to use website

**Required deployment arrangements:** Preparing accounts for the future users

**Product/development process compliance with specific standards:** None