

Ministry of Science and Higher Education of the Republic of Kazakhstan

Korkyt Ata Kyzylorda University

Institute of Artificial Intelligence

Approved

Chairman of the academic quality
Committee of the Institute of
Artificial Intelligence


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PLAN

for the " Aquila Backend " Club

for the 2025-2026 academic year

Kyzylorda, 2025

Club Goals and Objectives

Goal:

To develop students' professional skills in backend development, gain practical experience through real projects, and cultivate a culture of teamwork.

Objectives:

1. Teach the fundamentals of PHP and MySQL.
2. Master the principles of Object-Oriented Programming (OOP).
3. Learn to work with frameworks, particularly Laravel.
4. Develop skills in API integration and web service interaction.
5. Gain experience through teamwork on real projects.
6. Prepare for hackathons and final project defense.

Relevance of the Student Club

Today, the demand for backend developers in the field of information technology is increasing rapidly. The stability and security of modern web applications and digital services largely depend on the quality of the server side. Therefore, mastering server-side technologies such as PHP, MySQL, and Laravel is a key prerequisite for being competitive in the job market. The "Aquila Backend" club provides students not only with theoretical knowledge but also with the opportunity to gain hands-on experience through real projects. The club's activities aim to develop teamwork culture, creative thinking, and software design skills. As a result, students successfully defend their projects and become job-ready professionals.

“Aquila Backend” Club PLAN
for the 2025–2026 Academic Year

S/n	Activity	Implementation Period	Responsible Person	Venue	Completion Mark
1.	In the first month of the academic year , students are introduced to the basics of PHP. Topics include variables, arrays, loops, and logical operators. Participants learn syntax through solving simple problems and writing small scripts. By the end of the month, they create a mini-project such as a “Personal Diary” or “Online Calculator.”	September	Ilyas Abdikadyr	Institute of AI	
2.	This month focuses on working with MySQL databases . Students learn to create databases, manage tables, and execute SQL queries. They study how to connect MySQL to PHP projects using PDO and MySQLi libraries. The month concludes with a small web project called “User Database.”	October	Ilyas Abdikadyr	Institute of AI	
3.	In November , students study Object-Oriented Programming (OOP) in PHP. Topics include classes, objects, inheritance, encapsulation, and polymorphism. They learn to organize code efficiently. During the month, participants create a “Blog System” using OOP principles.	November	Ilyas Abdikadyr	Institute of AI	
4.	This month is devoted to frontend basics . Students learn to build and style web pages using HTML and CSS , and are introduced to JavaScript to add interactivity. By the end of the month, each student creates their own portfolio website .	December	Ilyas Abdikadyr	Institute of AI	
5.	January focuses on learning the MVC (Model-View-	January	Ilyas Abdikadyr	Institute of AI	

	Controller) pattern. Students understand how data, interface, and logic interact in projects. Using a simple MVC structure, they build a news feed or blog application .				
6.	In February , students get acquainted with the Laravel framework . They learn installation, routing, controllers, models, and database operations. Blade templates are used for layouts. As a result, they create a “Simple Blog” web application built with Laravel.	February	Ilyas Abdikadyr	Institute of AI	
7.	The theme of March is API and data exchange . Students study REST API principles, HTTP requests, and JSON data handling. They create their own small API services and learn to fetch data from external sources. The practical project is a “Weather API App.”	March	Ilyas Abdikadyr	Institute of AI	
8.	This month focuses on teamwork . Students are divided into groups with specific roles (backend, frontend, database). They learn collaboration using Git and GitHub . Teams develop their first joint project — a ToDo or mini-CRM system . Optimization and testing stages are included.	April	Ilyas Abdikadyr	Institute of AI	
9.	In May , members prepare for an upcoming hackathon . Focus is on improving code quality, performance, and error handling. Teams practice developing complete projects within short deadlines. A mini-hackathon is organized, where startup ideas are presented over three days	May	Ilyas Abdikadyr	Institute of AI	
10.	In June , students complete their final projects . Teams finalize and prepare their full web applications for presentation. Final testing and	June	Ilyas Abdikadyr	Institute of AI	

	documentation are conducted. At the end of the month, projects are presented and the best teams are awarded. This phase is called “Triumphal Entry into Rome” — marking the conclusion of the club’s yearly work.				
11.	During the summer months , students combine rest with personal development. Members are encouraged to take part in freelance projects , contribute to open-source , or develop their own ideas. Future directions for the next academic year are discussed.	July	Ilyas Abdikadyr	Institute of AI	

Director of the Institute of Artificial Intelligence:
Club Leader:



N. S. Kulmurzaev
I. K. Abdykadyr