

Bicycle Rental Accounting System Project presentation

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Introduction



Development Problem Statement

Objective

There is need to develop an application allowing bicycle rental outlet workers to automate their routine operation including renting and returning, registering new bicycles as well as rental outlet statistics gathering (based on the outlet revenues and rental operations).

Tasks

- 1. Domain study and database scheme development;
- 2. Database implementation (by means of a chosen tool);
- 3. Client application structure definition (modules);
- 4. Client application implementation and testing.

Introduction



Implementation Instruments

Following tools and instruments facilitated the development processes:

- MySQL for the deploying of the database;
- PHP for the client web-application markup and development;
- Javascript and Bootstrap to add the dynamics, live and user-friendliness the application;
- Trello for organizing development process;
- Github for storing the source code and controlling changes.

Introduction



Responsibility Matrix

	Datal	Database		Application			Report	
	Initial Design	Deployment	GUI and modules development	Necessary query specifying	Testing	Preparation	Presentation	
Kaan	Х		Х	Х	Х	Х		
Joonatan	Х	Х	х	Х	Х	Х		
Roman	Х	Х		Х	Х	Х	Х	

Application Side Major Use Cases



Outlet Salesperson

- 1. Register/signing to the app
- 2. Edit outlet information
- CRUD bicycle information (concerning outlet disposal)
- 4. CRUD rental orders
- 5. View statistical information

Administrator

- CRUD bicycle (including brands and types) information (no restriction)
- 2. CRUD outlet information

Application Side Module Scheme



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Application Side GUI Notes



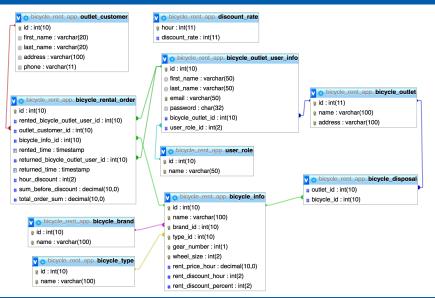
Application Side Implementation Notes



Database Side

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Database Diagram



Database Side



Database Entities Insight

Each database object is characterized by the following purposes:

- To store information on a bicycle bicycle_info, bicycle_brand, bicycle_type
- To store information on rental outlets and workers bicycle_outlet, bicycle_outlet_user_info, bicycle_disposal
- 3. To store information on customer outlet_customer
- To log outlet operations bicyle_rental_order

Database Side



Query Implementation Notes

Thank you for your attention!



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