

# Final project Self-assessment report

Team: 20120450-23120256-23122056

GitHub repo URL: <https://github.com/Hidebray/smart-restaurant>

## TEAM INFORMATION

MSSV	Họ và Tên	Git account	Contribution	Commits	Tỷ lệ
20120450	Phạm Hữu Đan	danhuupham	Frontend Developer, UI/UX Designer, Integration	120	51.9%
23120256	Trần Đại Hiệp	Hidebray	Backend Developer, Database Architect, Real-time Features	51	22.1%
23122056	Lâm Hoàng Vũ	vtpy23	Full-stack Developer, Git Manager, QA & Code Review	60	26.0%

## FEATURE LIST

**Project:** Smart Restaurant - QR Menu Ordering System

Students must input minus points to every uncompleted feature in the SE column.

\*SE: Self-evaluation

\*TR: Teacher review

ID	Features	Grade			Notes
		Point	SE*	TR*	
1	Overall requirements				
	User-centered design	-5	0		Built with user experience in mind, not just feature list. Focus on solving real restaurant problems: seamless QR ordering, efficient waiter workflow, real-time kitchen coordination, and convenient payment options
	Database design	-1	0		Database with tables: users, restaurants, menus, menu_items, categories, modifiers, tables, orders, order_items, payments
	Database mock data	-1	0		Sample restaurants, menu items, categories, tables, and test orders

ID	Features	Grade		Notes
	Website layout	-2	0	Two layouts: Customer mobile ordering interface and Admin dashboard
	Website architect	-3	0	Based on MVC architecture. Clear separation of concerns with controllers, services, repositories. Client-side validation, Input validation, Business rule validation
	Website stability and compatibility	-2	0	Mobile-first responsive design, tested on Chrome and Safari
	Document	-1	0	Clear documentation for developers and users: setup guide, API endpoints, database design, system architecture, user guide
	Demo video	-5	0	Video demonstrating all features: restaurant signup, menu management, QR ordering, payment, KDS
	Publish to public hosts	-1	0	Deployed to a public hosting service with accessible URL
	Development progress is recorded in Github	-7	0	Git history with meaningful commits, branches for features, pull requests
<b>2</b>	<b>Guest features (Customer Ordering)</b>			
	Home page (Menu page)	-0.25	0	Restaurant menu page loaded via QR code scan with categories and items
	View list of menu items	-0.25	0	Display menu items with images, prices, descriptions
	Filter menu items by			A combination of the criteria
	› Item name	-0.25	0	Search menu items by name
	› Category	-0.25	0	Filter by food categories (Appetizers, Main Dishes, Drinks, Desserts)
	Sort menu items by popularity	-0.25	0	Sort by most ordered items
	› Chef recommendation	-0.25	0	Filter/highlight items marked as chef's recommendations
	Menu item paging	-0.75	0	Pagination for large menus with infinite scroll. URL updated on search/filter/paging

ID	Features	Grade		Notes
	View menu item details	-0.25	0	Item detail page with full description, modifiers, allergen info
	View menu item status	-0.25	0	Display item availability status (Available, Unavailable, Sold out)
	Show related menu items	-0.25	0	Suggest items from same category or popular pairings
	View list of item reviews	-0.5	0	Customer reviews for menu items with pagination
	Add a new item review	-0.25	0	Logged-in customers can review items they ordered
	Shopping cart (Order Cart)			
	› Add a menu item to the Cart	-0.25	0	Add items with quantity selection
	› View and update items in the Cart	-0.5	0	Cart summary with items, quantities, modifiers, prices. Update quantity with auto-update totals
	Ordering and payment (Dine-in)			
	› Bind the shopping cart to the table session	-0.25	0	Cart persists for table session
	› Input order details (notes, special requests)	-0.25	0	Guest name, special instructions field
	› Add items to current order	-0.25	0	Customers can add more items to their unpaid order (single order per table session)
	› View order status	-0.25	0	Guest can track order status (Received → Preparing → Ready)
	› View order details	-0.25	0	Order confirmation with items, total, table number
	› Request bill	-0.25	0	Customer requests bill when ready to pay
	› Process payment after meal	-0.25	0	Stripe payment processing after dining

ID	Features	Grade		Notes
3	<b>Authentication and authorization</b>			
	Use a popular authentication library	-1	0	Passport.js with JWT strategy
	Registration (Customer Signup)	-0.5	0	Customer registration with email/password. Real-time email availability check
	Verify user input: password complexity, full name	-0.25	0	Password rules, required fields validation
	Account activation by email	-0.25	0	Email verification link sent on signup
	Social Sign-up/Sign-In	-0.25	0	Google OAuth integration
	Login to the website	-0.25	0	JWT-based authentication for admin/staff
	Authorize website features	-0.25	0	Role-based access control (Admin, Waiter, Kitchen Staff, Customer)
	Forgot password by email	-0.25	0	Password reset via email link
4	<b>Features for logged-in users (Customers)</b>			
	Update user profile	-0.25	0	Customer can update name, preferences
	Verify user input	-0.25	0	Input validation on profile updates
	Update the user's avatar	-0.25	0	Profile photo upload
	Update password	-0.25	0	Change password with old password verification
	Order history and tracking			

ID	Features	Grade		Notes
5	> View order history	-0.25	0	List of past orders linked to user account
	> View item processing status	-0.25	0	Track individual item status within an order (Queued, Cooking, Ready)
	> Real-time Order Updates	0.5	0	WebSocket-based live order status updates for customers
	<b>Administration features (Restaurant Admin)</b>			
	Create Admin accounts	-0.25	0	Admin creates additional Admin accounts
	Manage Admin accounts	-0.25	0	View, edit, deactivate Admin accounts
	Update admin profile	-0.25	0	Restaurant admin profile management
	Create Waiter accounts	-0.25	0	Admin creates accounts for waiters
	Create Kitchen Staff accounts	-0.25		Admin creates accounts for kitchen staff
	Manage menu categories	-0.25	0	Create, edit, delete food categories
	View menu item list	-0.5	0	List all menu items with filters and pagination
	Filter menu items by name, category	-0.25	0	Search and filter menu items
	Sort menu items by creation time, price, popularity	-0.25	0	Sortable menu item list
	Create a new menu item	-0.25	0	Add item with name, price, description, category, prep time
	Upload multiple menu item photos	-0.5	0	Multi-image upload for menu items

ID	Features	Grade		Notes
	Add menu item to category with modifiers	-0.25	0	Assign categories and create modifier groups (Size, Extras)
	Menu Item Modifiers	0.5	0	Modifier groups (Size, Extras) with price adjustments
	Specify menu item status	-0.25	0	Available, Unavailable, Sold out
	Verify user input	-0.25	0	Input validation for menu items
	Update a menu item	-0.25	0	Edit existing menu items
	Add, remove menu item photos	-0.25	0	Manage item images
	Change menu item category, modifiers	-0.25	0	Update item categorization
	Update menu item status	-0.25	0	Toggle availability
	Verify user input	-0.25	0	Validation on updates
	Customer orders (Order Management)			
	› View list of orders sorted by creation time	-0.25	0	Order list in KDS sorted by time
	› Filter orders by status	-0.25	0	Filter: Received, Preparing, Ready, Completed
	› View order details	-0.25	0	Full order details with items, modifiers, notes
	› Update order status	-0.25	0	Progress order through states: Received → Preparing → Ready → Completed
	› Kitchen Display System (KDS)	-0.5	0	Real-time order display for kitchen staff with sound notifications
	› Order Timer and Alerts	-0.25	0	Highlight orders exceeding item's configured prep time

ID	Features	Grade		Notes
	Table Management			
	› Create, edit, deactivate tables	-0.5	0	Create, edit, deactivate tables with capacity and location
	› QR Code Generation	-0.5	0	Generate unique QR codes per table with signed tokens
	› QR Code Download/Print	-0.25	0	Download QR as PNG/PDF for printing
	› QR Code Regeneration	-0.25	0	Regenerate QR and invalidate old codes
	Reports			
	› View revenue report in time range	-0.25	0	Daily, weekly, monthly revenue reports
	› View top revenue by menu item in time range	-0.25	0	Best-selling items report
	› Show interactive chart in reports	-0.25	0	Chart.js/Recharts for analytics dashboard (orders/day, peak hours, popular items)
<b>7</b>	<b>Waiter features</b>			
	View pending orders	-0.25	0	List of new orders waiting for waiter acceptance
	Accept/Reject order items	-0.25	0	Waiter can accept or reject individual order items
	Send orders to kitchen	-0.25	0	Forward accepted orders to Kitchen Display System
	View assigned tables	-0.25	0	See tables assigned to the waiter
	Mark orders as served	-0.25	0	Update order status when food is delivered to table
	Bill Management			
	› Create bill for table	-0.25	0	Generate bill with all order items, subtotal, tax, and total
	› Print bill	-0.25	0	Print bill to thermal printer or download as PDF

ID	Features	Grade		Notes
	> Apply discounts	-0.25	0	Apply percentage or fixed amount discounts to bill
	> Process payment	-0.25	0	Mark bill as paid (cash, card, or e-wallet)
8	Advanced features			
	Payment system integration	0.5	0.5	Payment gateway integration (ZaloPay, MoMo, VNPay, Stripe, etc.) - at least 1 required
	Fuzzy search	0.25	0.25	Fuzzy matching for menu item search with typo tolerance
	Use memory cache to boost performance	0.25	0	Redis for menu caching and session management
	Analyze and track user actions	0.25	0	Google Analytics for QR scan tracking, order conversion metrics
	Dockerize your project	0.25	0.25	Docker containers for backend, frontend, database
	CI/CD	0.25	0	GitHub Actions for automated testing and deployment
	Monitoring and logging	0.25	0	Centralized application logs, metrics, dashboards, and alerting (e.g., ELK/EFK, Prometheus/Grafana)
	BI integration	0.25	0	Connect operational data to BI tools for reporting and dashboards (e.g., Power BI, Tableau, Metabase)
	Advanced authorization (RBAC)	0.25	0	Fine-grained role/permission management for Admin/Chef/Waiter and other staff roles
	WebSocket real-time updates	0.5	0.5	Socket.IO for real-time features: KDS order notifications, customer order status tracking, waiter new order alerts, kitchen ready notifications, table status updates
	Multi-tenant support	0.5	0	Multiple restaurants (tenants) with strict data isolation; tenant-scoped RBAC and configuration
	Multilingual support	0.25	0.25	i18n for English/Vietnamese language selection

## GIT HISTORY

### Contributors



**Repository:** smart-restaurant  
**Main Branch:** main  
**Total Commits:** 231 commits  
**Contributors:** 3 thành viên

Author	Commits	Tỷ lệ
Phạm Hữu Đan	120	51.9%
Lâm Hoàng Vũ	60	26.0%
Trần Đại Hiệp	51	22.1%

```
$ git shortlog -s -n
120  Dan Pham
60   vtpy23
51   Hidebray
```

Chi tiết Commits (Sắp xếp theo thời gian)

Date	Author	Commit Hash	Message
2026-01-05	Trần Đại Hiệp	9ee76be	Generation by Google AI Studio & Gemini
2026-01-05	Trần Đại Hiệp	1ba4dbc	chore: init nextjs project and setup docker postgres
2026-01-06	Trần Đại Hiệp	26d3a73	feat: setup prisma schema and seed data
2026-01-06	Trần Đại Hiệp	85531ba	feat: connect guest menu to real api
2026-01-06	Trần Đại Hiệp	f310b16	feat: complete guest ordering flow (menu display, cart drawer, order api)
2026-01-06	Trần Đại Hiệp	2289a56	feat: setup standalone socket.io server for realtime features
2026-01-06	Trần Đại Hiệp	9452e04	feat: setup socket.io server and client connection
2026-01-06	Trần Đại Hiệp	85b3a75	feat: implement kitchen kds dashboard with realtime order updates
2026-01-06	Trần Đại Hiệp	e619957	feat: implement waiter dashboard and refine kitchen workflow (pending/accepted logic)
2026-01-07	Trần Đại Hiệp	4d99fe7	docs: add project tasks tracking and comprehensive setup guide

Date	Author	Commit Hash	Message
2026-01-07	Trần Đại Hiệp	bfb4f7e	docs: add project tasks tracking and comprehensive setup guide
2026-01-12	Phạm Hữu Đan	386703a	Split the project into two repositories: frontend and backend
2026-01-12	Phạm Hữu Đan	6a7d05a	Standardize the standard folder structure
2026-01-12	Phạm Hữu Đan	9a33d55	Delete unnecessary .gitignore files
2026-01-12	Phạm Hữu Đan	befa08b	Update Readme
2026-01-13	Trần Đại Hiệp	48fc1d8	feat(auth): implement user authentication and authorization
2026-01-13	Trần Đại Hiệp	bf0fed1	feat: implement table management and QR code generation
2026-01-14	Trần Đại Hiệp	707a5a5	feat(orders): support item modifiers and add Socket.IO order events
2026-01-14	Trần Đại Hiệp	0fdb5ff	feat(frontend): send and display order modifiers; add tables QR page
2026-01-14	Trần Đại Hiệp	7f55697	feat: implement jwt authentication logic and login API
2026-01-14	Trần Đại Hiệp	7f216da	feat: implement login page UI and authentication flow
2026-01-14	Trần Đại Hiệp	10fd185	chore: update seed script to use hashed passwords
2026-01-14	Trần Đại Hiệp	bdbfa76	chore: update seed script to use hashed password
2026-01-14	Trần Đại Hiệp	64ec0ba	feat: add middleware to protect private routes
2026-01-15	Lâm Hoàng Vũ	fc33d99	setup admin layout and product list view, enable admin product creation and editing
2026-01-15	Lâm Hoàng Vũ	f12f53f	Merge pull request #1 from Hidebray/vu
2026-01-15	Phạm Hữu Đan	eb10266	docs: Add initial project description and self-assessment report

Date	Author	Commit Hash	Message
2026-01-15	Phạm Hữu Đan	dfeee1b	Rename components
2026-01-15	Phạm Hữu Đan	8d20288	Rename components
2026-01-15	Phạm Hữu Đan	58e6f23	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-15	Phạm Hữu Đan	a83fc10	docs: Add database seeding command and default login credentials to README
2026-01-15	Phạm Hữu Đan	ca7395e	feat: Implement initial backend API for products and tables, and set up frontend
2026-01-15	Phạm Hữu Đan	d1bf4cc	feat: Add initial admin dashboard layout, kitchen order management page
2026-01-15	Phạm Hữu Đan	1a3d173	feat: implement initial frontend pages and components for kitchen order management
2026-01-15	Phạm Hữu Đan	40fcf6d	feat: Implement full-stack authentication, user management, and role-based interfaces
2026-01-15	Phạm Hữu Đan	2fcba39	feat(admin): Add StaffForm component for creating new staff members
2026-01-15	Phạm Hữu Đan	e27da20	feat: Implement admin staff management page with user CRUD operations
2026-01-15	Phạm Hữu Đan	83d0fbf	feat: Implement comprehensive table management with CRUD operations, QR code generation
2026-01-15	Phạm Hữu Đan	eac3ec9	make the text darker
2026-01-15	Phạm Hữu Đan	1810cc7	docs: Revamp README with comprehensive project overview
2026-01-16	Trần Đại Hiệp	820c565	feat: implement product modifier management
2026-01-16	Trần Đại Hiệp	481f83f	feat(modifiers): complete and stabilize product modifier workflow
2026-01-16	Trần Đại Hiệp	9dd32f9	feat: implement analytics and reporting dashboard
2026-01-16	Trần Đại Hiệp	4f255f0	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>

Date	Author	Commit Hash	Message
2026-01-16	Phạm Hữu Đan	cd5b14a	feat: Implement user authentication (registration, login) and backend order management
2026-01-16	Phạm Hữu Đan	69d4e97	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-16	Phạm Hữu Đan	6cf5829	small fix
2026-01-16	Phạm Hữu Đan	8f01293	feat: Add initial project structure including mockups for customer, admin, and waiter UIs
2026-01-16	Phạm Hữu Đan	472d41e	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-16	Phạm Hữu Đan	781d7fb	feat: add mobile Header component with title, optional back button
2026-01-16	Phạm Hữu Đan	e2b1cf8	feat: Implement guest application with table identification, cart management
2026-01-16	Phạm Hữu Đan	c2dced8	feat: add mobile bottom navigation component with menu, cart, orders, and profile links
2026-01-16	Phạm Hữu Đan	1737317	feat: Implement admin order management and sales reporting with new API endpoints and UI
2026-01-16	Phạm Hữu Đan	f67af26	feat: Implement a comprehensive restaurant order management system
2026-01-16	Phạm Hữu Đan	9600e04	feat: Add real-time waiter and kitchen dashboards for order management
2026-01-16	Phạm Hữu Đan	60e4d30	feat: Implement initial user authentication with email verification
2026-01-16	Phạm Hữu Đan	f902280	feat: Implement user authentication including registration, login, email verification
2026-01-16	Phạm Hữu Đan	5a73bd0	feat: Implement user authentication with local and Google OAuth
2026-01-16	Phạm Hữu Đan	0c4738b	feat: Introduce customer registration, email verification, and Google authentication
2026-01-16	Phạm Hữu Đan	99e7b5b	docs: Update environment configuration templates with actual non-sensitive values
2026-01-16	Phạm Hữu Đan	3bcca69	docs: Reset environment templates to default placeholders

Date	Author	Commit Hash	Message
2026-01-16	Phạm Hữu Đan	a545391	docs: Restore DATABASE_URL to actual configuration
2026-01-17	Trần Đại Hiệp	5d1a82d	feat: implement bill modal and payment demo (Task 4.1)
2026-01-17	Trần Đại Hiệp	0942ef0	feat: integrate stripe for online payments (Task 4.4)
2026-01-17	Trần Đại Hiệp	d84a76e	feat: implement table call assistance (payment request) notification
2026-01-17	Trần Đại Hiệp	030ee4d	docs: update README with payment and notification features
2026-01-17	Trần Đại Hiệp	29f1e10	ops: setup production dockerfiles and compose
2026-01-17	Trần Đại Hiệp	1e2340b	docs: comprehensive update of README with all features and changelog
2026-01-17	Trần Đại Hiệp	abc577f	feat: implement customer self-registration
2026-01-17	Trần Đại Hiệp	f35efe7	feat: enable customer item reviews
2026-01-17	Trần Đại Hiệp	d544362	feat: implement fuzzy search for products
2026-01-17	Trần Đại Hiệp	b73a1a7	feat: add multi-language support (EN/VI)
2026-01-17	Trần Đại Hiệp	1b43dbe	fix: add language switcher to all pages
2026-01-17	Trần Đại Hiệp	6120a7d	fix: implement translations on login page
2026-01-17	Trần Đại Hiệp	451cd85	feat: add translations to all dashboards (waiter, kitchen, admin)
2026-01-17	Trần Đại Hiệp	881199b	docs: update README with Module 6 features
2026-01-17	Trần Đại Hiệp	bc7544c	docs: add Module 7 missing features to tasks.md
2026-01-17	Trần Đại Hiệp	8b8944a	feat: add QR code download as PNG feature

Date	Author	Commit Hash	Message
2026-01-17	Trần Đại Hiệp	fd6889c	feat: add print bill functionality with react-to-print
2026-01-17	Trần Đại Hiệp	dc31d63	docs: mark Tasks 7.4 & 7.5 complete, update README
2026-01-17	Trần Đại Hiệp	1eb14eb	feat: add pagination to guest menu (12 items per page)
2026-01-17	Trần Đại Hiệp	d09f9ed	docs: mark Task 7.6 complete, update README
2026-01-18	Phạm Hữu Đan	4525557	feat: Implement full authentication flow with login, forgot/reset password, Google OAuth
2026-01-18	Phạm Hữu Đan	517f53e	feat: introduce initial frontend structure including guest menu
2026-01-18	Phạm Hữu Đan	c8b2875	feat: Implement guest cart and ordering system with new pages
2026-01-18	Phạm Hữu Đan	0be3079	feat: implement guest menu page with product display, search, category filtering
2026-01-18	Phạm Hữu Đan	ee34b87	feat: implement guest menu page with product display using Zustand menu store
2026-01-18	Phạm Hữu Đan	b41867f	feat: Implement guest order management with viewing, payment, waiter assistance
2026-01-18	Phạm Hữu Đan	bf2ef60	feat: Add initial public-facing pages including landing, menu, and tables
2026-01-18	Phạm Hữu Đan	0b57f7e	feat: Implement initial user authentication flows with internationalization support
2026-01-18	Phạm Hữu Đan	6049837	feat: Implement guest menu page with product display, search, category filtering
2026-01-18	Phạm Hữu Đan	ddeeb1a	feat: Implement user login with email/password and Google authentication
2026-01-18	Phạm Hữu Đan	7303435	feat: Implement login page with email/password and Google authentication
2026-01-18	Phạm Hữu Đan	7cebe33	fix the QR Code generation
2026-01-18	Phạm Hữu Đan	b841108	small fix UI

Date	Author	Commit Hash	Message
2026-01-18	Phạm Hữu Đan	902d887	add more products
2026-01-18	Phạm Hữu Đan	ebed3c0	fix UI and translation
2026-01-19	Lâm Hoàng Vũ	0576c84	task 7.9
2026-01-19	Lâm Hoàng Vũ	98352b3	Add admin reports feature with revenue charts
2026-01-19	Lâm Hoàng Vũ	27d8953	Merge pull request #2 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	ba2859a	feat(products): add admin products management
2026-01-19	Lâm Hoàng Vũ	fe3d50f	Merge pull request #3 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	70dc8c1	feat(products): update product schema and admin product form
2026-01-19	Lâm Hoàng Vũ	013b038	update tasks
2026-01-19	Lâm Hoàng Vũ	7db57f1	Merge pull request #4 from Hidebray/vu
2026-01-19	Trần Đại Hiệp	2ed3636	feat: implement order timer for kds and waiter dashboard with visual alerts
2026-01-19	Trần Đại Hiệp	8e657eb	feat: implement qr code regeneration and secure token authentication
2026-01-19	Trần Đại Hiệp	af18ee0	feat: implement chef recommendations with admin toggle and badging
2026-01-19	Trần Đại Hiệp	3f2fa34	feat: implement related items suggestion in product modal
2026-01-19	Trần Đại Hiệp	2e42dce	feat: implement product popularity tracking and menu sorting
2026-01-19	Lâm Hoàng Vũ	77c6a01	feat: add discount functionality to orders with update and display in bill modal
2026-01-19	Lâm Hoàng Vũ	3063d7e	feat: enhance order processing with improved discount application

Date	Author	Commit Hash	Message
2026-01-19	Lâm Hoàng Vũ	40f8bc1	Merge pull request #5 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	9c70944	feat(products): add allergens field to product schema
2026-01-19	Lâm Hoàng Vũ	956ff3c	Update tasks.md to mark Task 7.17: Discount System as complete
2026-01-19	Lâm Hoàng Vũ	4fdc24c	Merge pull request #6 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	9f2f27f	Update bill modal and sync prisma migration
2026-01-19	Lâm Hoàng Vũ	2a2c045	Merge pull request #7 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	7053836	feat: enhance user and table management with waiter assignment
2026-01-19	Lâm Hoàng Vũ	bc535fd	Merge pull request #8 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	130647e	style: update UI components for improved accessibility and visual consistency
2026-01-19	Lâm Hoàng Vũ	df9c191	Merge pull request #9 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	8e73f49	feat: introduce loyalty points system with models for loyalty tiers
2026-01-19	Lâm Hoàng Vũ	ec61d25	Merge pull request #10 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	e656d21	feat: implement user feedback system with ratings and comments for products
2026-01-19	Lâm Hoàng Vũ	dbdb1d2	Merge pull request #11 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	8af72ea	feat: implement inventory management system with models
2026-01-19	Lâm Hoàng Vũ	ca6f139	Merge pull request #12 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	698b317	feat: implement table reservation system with new Reservation model



Date	Author	Commit Hash	Message
2026-01-19	Lâm Hoàng Vũ	23315c8	Merge pull request #13 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	ee8de9b	feat: integrate user authentication system with login, registration
2026-01-19	Lâm Hoàng Vũ	010e3e6	Merge pull request #14 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	fe2a2de	Remove obsolete documentation files
2026-01-19	Lâm Hoàng Vũ	ad58d25	Merge pull request #15 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	2c14081	Add inventory, loyalty, reservation modules and related UI
2026-01-19	Lâm Hoàng Vũ	4d85e52	Merge pull request #16 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	c8bb5f7	feat: add analytics module with AnalyticsSnapshot model
2026-01-19	Lâm Hoàng Vũ	afd5565	Merge pull request #17 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	b7dddb9	Advanced Analytics Dashboard
2026-01-19	Lâm Hoàng Vũ	2a86c30	Merge pull request #18 from Hidebray/vu
2026-01-19	Lâm Hoàng Vũ	128463c	Revert "Merge pull request #18 from Hidebray/vu"
2026-01-19	Lâm Hoàng Vũ	c1f383a	feat: add loyalty points, inventory, and reservation systems
2026-01-19	Lâm Hoàng Vũ	f96a22f	thêm vào dependencies trong package.json
2026-01-19	Phạm Hữu Đan	ad00746	update self assessment report
2026-01-19	Phạm Hữu Đan	ea9d031	fix bug create product
2026-01-19	Phạm Hữu Đan	18188e6	use Cloudinary for upload image

Date	Author	Commit Hash	Message
2026-01-19	Phạm Hữu Đan	29aef72	use Cloudinary for profile picture upload
2026-01-19	Phạm Hữu Đan	57f7bc5	update item review
2026-01-19	Phạm Hữu Đan	65f53f4	update request bill
2026-01-19	Phạm Hữu Đan	c4a50de	update Menu item paging
2026-01-19	Phạm Hữu Đan	b21b8c3	update guest UI and translation
2026-01-19	Phạm Hữu Đan	864049d	update product modal
2026-01-19	Phạm Hữu Đan	fdb6a9d	Verify user input
2026-01-19	Phạm Hữu Đan	c0bfb91	user order history
2026-01-19	Phạm Hữu Đan	887f508	update translation
2026-01-19	Phạm Hữu Đan	c139c89	View item processing status and update UI kitchen
2026-01-19	Phạm Hữu Đan	0aaa118	View menu item status
2026-01-19	Phạm Hữu Đan	d7ae58e	View menu item status
2026-01-19	Phạm Hữu Đan	caa72c0	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-19	Phạm Hữu Đan	557bbdf	Show related menu items
2026-01-19	Phạm Hữu Đan	61d9d68	Input order details
2026-01-19	Phạm Hữu Đan	e838dbc	update team info
2026-01-20	Phạm Hữu Đan	f10232d	update Customer Signup

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2026-01-20	Phạm Hữu Đan	4c91484	update Registration and Verify user input
2026-01-20	Phạm Hữu Đan	ceb3e97	Manage Admin accounts
2026-01-20	Phạm Hữu Đan	b1c77e7	update UI Staff
2026-01-20	Phạm Hữu Đan	5c4ae54	Update admin profile
2026-01-20	Phạm Hữu Đan	ed711cc	Manage menu categories
2026-01-20	Phạm Hữu Đan	3a3150d	update translation
2026-01-20	Phạm Hữu Đan	2a7fb54	add filter Categories
2026-01-20	Phạm Hữu Đan	e413173	update UI Products page
2026-01-20	Phạm Hữu Đan	f2c0474	Filter orders by status
2026-01-20	Phạm Hữu Đan	947eb53	View order details
2026-01-20	Phạm Hữu Đan	cd6e68e	Update order status
2026-01-20	Phạm Hữu Đan	902fe7c	Kitchen Display System with sound
2026-01-20	Phạm Hữu Đan	e479a54	update Table Management
2026-01-20	Phạm Hữu Đan	ba674c4	View revenue report in time range
2026-01-20	Phạm Hữu Đan	28fe5ff	View top revenue by menu item in time range
2026-01-20	Phạm Hữu Đan	987720c	Show interactive chart in reports
2026-01-20	Phạm Hữu Đan	9f3ec53	View assigned tables

Date	Author	Commit Hash	Message
2026-01-20	Phạm Hữu Đan	d18db47	Apply discounts
2026-01-20	Phạm Hữu Đan	b205e6f	update UI for discount price
2026-01-20	Phạm Hữu Đan	edf100d	use Stripe for payment
2026-01-20	Phạm Hữu Đan	81dd32b	feat: implement real fuzzy search with Fuse.js for typo tolerance
2026-01-20	Phạm Hữu Đan	09e7187	fix: implement role-based access control in middleware
2026-01-20	Phạm Hữu Đan	c09492c	fix: allow ADMIN to access kitchen and waiter pages
2026-01-20	Phạm Hữu Đan	0668bf7	update package.json
2026-01-20	Phạm Hữu Đan	7e56b05	update UI profile
2026-01-20	Phạm Hữu Đan	12b415b	update UI table selection
2026-01-20	Phạm Hữu Đan	91a77ca	update UI for cart
2026-01-20	Phạm Hữu Đan	d01bef9	Refine UI/UX and Localizations across Profile, Tables, Cart, and Waiter pages
2026-01-20	Lâm Hoàng Vũ	d4f406a	remove Analytics link from Admin layout
2026-01-20	Lâm Hoàng Vũ	385428a	Remove FEATURE_COMPARISON_REPORT.md and update package-lock.json
2026-01-20	Lâm Hoàng Vũ	5f0fd03	Merge pull request #19 from Hidebray/config-update-92667
2026-01-20	Lâm Hoàng Vũ	b456809	Enhance localization by adding translations for Loyalty, Inventory, and Reservations
2026-01-20	Lâm Hoàng Vũ	8c5583a	Merge pull request #20 from Hidebray/config-update-92667
2026-01-20	Lâm Hoàng Vũ	f9127b4	Refactor Admin layout to improve accessibility and streamline navigation

Date	Author	Commit Hash	Message
2026-01-20	Lâm Hoàng Vũ	812973c	Merge pull request #21 from Hidebray/config-update-92667
2026-01-20	Lâm Hoàng Vũ	fc5418f	add Final Project Report
2026-01-20	Lâm Hoàng Vũ	9e9bcbe	Merge pull request #22 from Hidebray/config-update-92667
2026-01-20	Lâm Hoàng Vũ	4d14226	Implement loyalty points redemption in cart functionality
2026-01-20	Lâm Hoàng Vũ	4447a90	Merge pull request #23 from Hidebray/config-update-92667
2026-01-20	Phạm Hữu Đan	129ac98	update UI /menu and /menu/items
2026-01-20	Phạm Hữu Đan	01dfd52	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-20	Phạm Hữu Đan	3fc7ba2	update guest UI
2026-01-20	Lâm Hoàng Vũ	c042030	Enhance loyalty points display and localization support
2026-01-20	Phạm Hữu Đan	330dde5	update UX/UI /kitchen
2026-01-20	Phạm Hữu Đan	693af0c	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-20	Lâm Hoàng Vũ	d237167	Add category name localization for guest menu page
2026-01-20	Phạm Hữu Đan	0644d9b	update realtime in /waiter
2026-01-20	Phạm Hữu Đan	f8ce5b7	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-20	Lâm Hoàng Vũ	5f80431	Add copy voucher code feature with click to clipboard
2026-01-20	Phạm Hữu Đan	08ea99b	update UI /waiter
2026-01-20	Phạm Hữu Đan	f7a5259	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>

Date	Author	Commit Hash	Message
2026-01-20	Phạm Hữu Đan	f00b37c	update UI /verify-email
2026-01-20	Phạm Hữu Đan	d9f1b5c	add ChefHat
2026-01-20	Lâm Hoàng Vũ	da73a29	Enhance seed data script with user roles, loyalty points, vouchers
2026-01-20	Phạm Hữu Đan	9ec7940	display allergen info /guest
2026-01-20	Phạm Hữu Đan	9334fc4	Merge branch 'main' of <a href="https://github.com/Hidebray/smart-restaurant">https://github.com/Hidebray/smart-restaurant</a>
2026-01-20	Phạm Hữu Đan	5f53012	fix loyalty UI
2026-01-20	Phạm Hữu Đan	c95b856	store URL params in guest page
2026-01-20	Lâm Hoàng Vũ	57c8d3f	Fix admin dashboard to use real data from API instead of mock data
2026-01-20	Lâm Hoàng Vũ	b0facc5	Add inventory stock validation when creating orders
2026-01-20	Phạm Hữu Đan	8b81959	Fix tsconfig include backend prisma seed
2026-01-20	Phạm Hữu Đan	ac5203a	Fix inventory type import path
2026-01-20	Phạm Hữu Đan	3af1d48	Fix inventory type imports
2026-01-20	Phạm Hữu Đan	918f573	Fix inventory types import in inventory page
2026-01-20	Phạm Hữu Đan	f75420c	Fix final typescript errors in product modal and loyalty imports
2026-01-20	Phạm Hữu Đan	0b65765	Remove build log files
2026-01-20	Lâm Hoàng Vũ	52d083f	chore(db): add large seed data
2026-01-20	Lâm Hoàng Vũ	a5bf0f5	docs: add self assessment report

# PROJECT SUMMARY

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## System Overview

**Smart Restaurant** is a QR-based menu ordering system for **dine-in service** that enables restaurants to:

- Manage digital menus with categories, items, and modifiers
- Generate unique QR codes for each table
- Allow customers to scan QR, browse menu, and place orders from their phones
- Customers can add items to their current order during their visit (single order per table session)
- Process payments after the meal via payment gateway integration (ZaloPay, MoMo, VNPay, Stripe, etc.)  
- pay-after-meal model
- Track orders in real-time via Kitchen Display System (KDS)
- View analytics and performance reports

**Note:** This is a single-restaurant system. Multi-tenant support is not included.

## Technology Stack

- **Architecture:** Single Page Application (SPA)
- **Frontend:** ReactJS / NextJS
- **Backend:** NodeJS with Express/similar framework
- **Database:** SQL or NoSQL database
- **Authentication:** Passport.js with JWT
- **Payment:** Payment Gateway (ZaloPay, MoMo, VNPay, Stripe, etc.)
- **Real-time:** Socket.IO / WebSocket
- **Caching:** Redis (optional)
- **Hosting:** Public hosting service

## Key User Flows

1. **Restaurant Setup:** Admin account creation → Admin login → Menu Creation → Table Setup → QR Generation
  2. **Customer Registration:** Sign up → Email Verification → Login → Access order history
  3. **Customer Ordering (Dine-in):** Scan QR → View Menu → Add to Cart → Submit Items → Track Order → Add More Items → Request Bill → Payment
  4. **Waiter Order Acceptance:** Customer Places Order → Waiter Receives Notification → Waiter Reviews → Accept/Reject → Send to Kitchen
  5. **Order Processing (Kitchen):** Waiter Accepts Order → Kitchen Receives → Preparing → Ready → Waiter Serves → Completed
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