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OrdoLexis: Cross-Platform Law Information System for Streamlining Legal Operations at Dati Law Office, La Trinidad, Benguet

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Abstract – *The Dati Law Office, a small legal micro-enterprise, faced significant operational challenges due to a fully manual, paper-based workflow. Client records, case files, and scheduling relied on handwritten notes and physical documents, leading to time-consuming retrieval, missed deadlines, double-bookings, data inaccuracies, and heavy staff workload. These challenges necessitated a centralized, automated, and reliable information system. This research aimed to develop OrdoLexis, a cross-platform Law Office Information System, tailored to the needs of the office to streamline and modernize daily legal operations. Based on identified functional and non-functional requirements including case management, scheduling, documentation, and security, OrdoLexis was developed. Its key features automate case tracking, organize client records, schedule hearings, manage legal documents and attachments, and issue SMS and Email reminders for appointments and deadlines. The developed system was deployed and evaluated using the Computer System Usability Questionnaire (CSUQ). The result, a mean score of 6.16 (Strongly Agree), confirms the system's effectiveness. OrdoLexis successfully achieved its purpose by improving data accuracy, reducing processing time, streamlining scheduling, and enhancing document retrieval. The study concludes by offering a practical, scalable digital solution that supports more organized and responsive legal service delivery for small law practices seeking operational efficiency.*

Keywords – *Case Management System, Client Management, Digital Transformation, Legal Information System, Lawyer Workflow*

INTRODUCTION

Information systems are essential tools for modern organizations, enabling efficient data processing, storage, and decision-making across various operations. Defined as integrated components composed of hardware, software, telecommunications, human resources, and procedures, information systems serve as critical assets that support organizational productivity and knowledge management (Zwass & Vladimir, 2025). As research continues to highlight their importance, industries worldwide including the legal profession are increasingly adopting digital solutions to improve operational efficiency (Hasan, 2018).

Within the legal sector, digital platforms such as law office tracking and case management systems have become vital for streamlining documentation, scheduling, communication, and workflow coordination (Avuçlu & Yalçın, 2024). These systems enhance transparency and support high-volume practices by reducing administrative burden. Likewise, information technologies now form an indispensable part of legal

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work, particularly for remote communication, secure data handling, and evidence management (Komarnytska, 2024).

Despite these advancements, small and medium law firms across jurisdictions continue to struggle with manual, paper-based systems that impede operational efficiency and data security (Caserta, 2020). A study by Bagby (2020) notes that 74% of small-firm attorneys spend excessive time on administrative tasks, with only 25% using practice management software and even fewer adopting tools for docketing or cost tracking. This digital lag is often linked to gaps in legal training, where many practitioners lack the IT fluency needed to operate modern legal technologies effectively (Artemova & Bagaley, 2024). Legislative readiness also plays a role, as governments adapt laws and public services to the demands of digital transformation (Getmantseva & Protskiv, 2024).

Successful international implementations demonstrate the transformative value of legal information systems. For example, Slovenia's national legal system (PIS) significantly improved access to legislation and jurisprudence while saving 1.2 million EUR annually through open-data initiatives (Observatory of Public Sector Innovation, 2019). Germany's NeuRIS project likewise centralizes legal records and streamlines documentation across federal and state levels, improving accessibility for both professionals and the public (Ihlefeld, 2023).

In Southeast Asia, however, legal tech adoption remains slow. Infrastructure gaps, fragmented systems, and low digital resilience continue to hinder modernization efforts (Zreik, 2024). The Philippines reflects this trend: despite national initiatives like the Supreme Court's Strategic Plan for Judicial Innovations (SPJI) 2022–2027, many small law offices rely on outdated administrative practices. Barriers such as cost, data security concerns, and limited awareness prevent widespread adoption of legal digital tools. Meanwhile, over 1.2 million pending court cases (Supreme Court, 2023) highlight the pressing need for efficient legal information systems.

Existing government systems such as the Integrated Case Management System (ICMS) of the CSC-OLA show the potential of digital tools but also reveal limitations including technical failures and inadequate reporting features which necessitate more robust solutions (Munoz, 2018). Moreover, digital legal systems must comply with strict confidentiality and cybersecurity standards, including the Data Privacy Act of 2012 (Məmmədov, 2021).

Case management and scheduling systems are especially critical. Efficient case tracking enables timely justice, prevents delays, and supports organizational accountability across courts, universities, and government agencies (Ngezana & Muchaonyerwa, 2020; Izah & Yakubu, 2023). Improved scheduling reduces backlogs, enhances fairness, and prioritizes sensitive cases appropriately (Kletzander et al., 2025; Espitia & Auriol, 2025). Scholars emphasize that modern scheduling systems support workload balancing, resource optimization, and decision-making under uncertainty (Aleksandravičiūtė, 2025; Azab et al., 2025).

Given these needs, cross-platform applications offer significant advantages for law firms. They ensure accessibility across devices, support remote work, and can provide secure offline functionality important for areas with unstable internet connectivity (Mangal, 2025; Crudu, 2025; Lim, 2018). Despite gradual improvements, the literature reveals a gap: few studies document end-to-end development of integrated information systems tailored specifically for Philippine law firms. Existing work often focuses on government agencies or prototype systems with limited applicability to private practice.

This gap underscores the need to design, implement, and evaluate a customized Legal Information System for Philippine law offices particularly small to

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mid-sized firms that lack access to costly commercial solutions. Such a system has the potential to modernize administrative functions, enhance service delivery, and support the broader digital transformation of the Philippine legal sector.

OBJECTIVES OF THE STUDY

The primary objective of this project is to develop OrdoLexis, a cross-platform Law Information System for Dati Law Office, which will facilitate the processes of the legal office.

Specifically, the study aims to attain the following:

1. To identify the functional and non-functional requirements for OrdoLexis;
2. To determine the features for the development of OrdoLexis;
3. To design and develop the features of OrdoLexis;
4. To deploy OrdoLexis for testing using Computer System Usability Questionnaire.

MATERIALS AND METHODS

Feature-Driven Development (FDD) is an Agile methodology centered on delivering client-valued functionality through iterative and incremental processes. It involves developing a comprehensive model, identifying features, planning feature development, designing by feature, and building by feature. FDD is particularly effective for information systems that require continuous refinement based on evolving user needs, making it appropriate for the development of OrdoLexis, a legal office information management system.

FDD provides a structured approach that ensures each iteration produces a functional component of the system while accommodating changes throughout the development cycle. Its emphasis on feature lists, domain modelling, and iterative refinement enables developers to continuously validate the system with stakeholders and users.

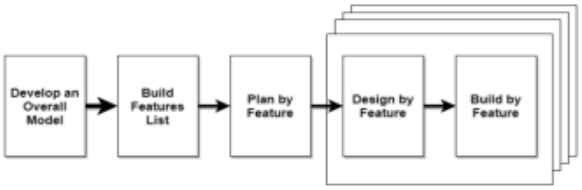

Figure 1. *Adopted FDD Model (Rychlý, M., Tichá, P. 2008) Figure No 5 illustrates the five core activities that define the Feature-Driven Development (FDD) model.*

2.1.1 Develop an Overall Model

The first activity, developing an overall model, involved conducting high-level domain modelling based on user input and expert consultation. This stage was critical in identifying the boundaries and scope of the system, ensuring that all stakeholders shared a common understanding of the problem space. It established the architectural foundation on which features were later designed and implemented. The researchers actively participated in data-gathering procedures with the lawyer and the staff to capture the subject matter, processes, user roles, and workflow challenges present in a typical law office. Using interviews, observation, document analysis, and document review as complementary techniques, the researchers were able to craft the system's object model with a well-rounded understanding of current operations and informational needs.

2.1.1.1 Behavioural and Database Diagram Designs

The researchers used UML diagrams to model the behavioural design of the Database structure through Entity-Relationship Diagram (ERD) (Figure No 2). This is necessary for understanding the basic entities and the use cases that were expected to be present for OrdoLexis. Figure No 2 also shows the plan of the database through Crow's Foot notation.

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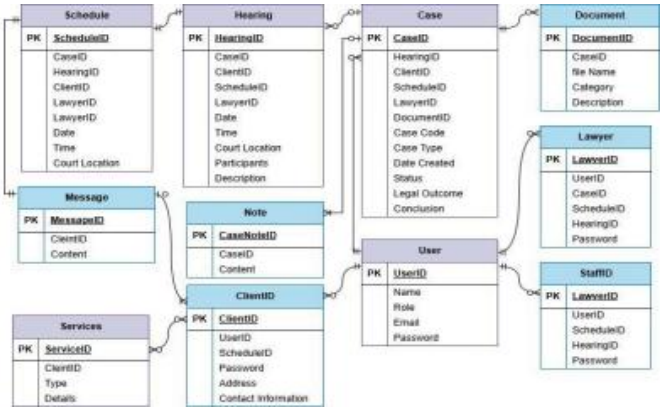

Figure 2. *Entity-Relationship Diagram for Ordolexis*

To complement the domain model, the researchers created a Class Diagram that captured the interactions between various user types: lawyers, the staff, and the System administrator. It outlined the core functionalities of OrdoLexis and the associated methods. This diagram provided a high-level visualization of user objectives and served as a reference for designing user-centric functionalities. The diagram was derived from scenario-based interviews and validated through iterative feedback sessions with end users. The expected output included a validated UML Class Diagram, interaction narratives, and a detailed mapping between roles and use case functionalities. Figure No 3 shows the Class Diagram created for the system.

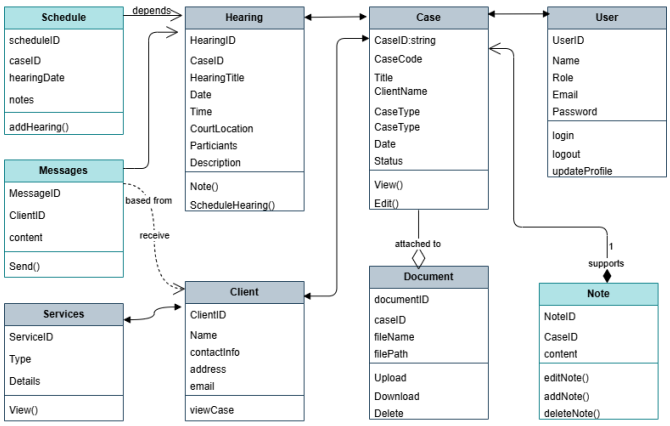

Figure 3. *Class Diagram for Ordolexis*

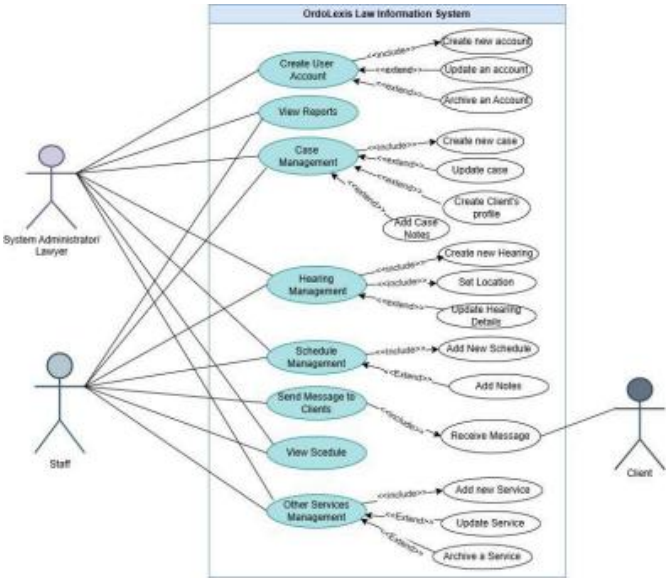

Figure 4. *Use Case Diagram for Ordolexis*

Based on the above figure, the system has only three (3) user roles: the Lawyear, who is the System Administrator; the Staff; and the Client. The difference in terms of access privilege of the Lawyer and the Staff is in Account Management. The Lawyer has the right to add, update, and archive an account, while all other functionalities are shared with the Staff in terms of Case Management, Hearing Management, Schedule Management, and Other Service Management.

2.1.2 Build Features List

Building a features list involved constructing a comprehensive identification of client-valued functionalities essential to OrdoLexis. This process began by gathering detailed user stories through interviews with the Dati Lawyer and Staff, observing office workflows, and analysing current system limitations. The researchers extracted and translated these stories into a user story board for easier translation into functional requirements, then decomposed them into smaller, actionable features. Each feature was evaluated based on its value, feasibility, and stakeholder priority. The Functional Requirements are discussed in Table 1, and Table 4 presents the List of Features (Chapter 3, Sections 3.1 and 3.2).

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2.1.3 Plan by Feature

Planning by feature was a fundamental practice in the Feature-Driven Development (FDD) methodology, which was especially critical in Phase 3 of the process. For OrdoLexis, this approach involved breaking down the law office information system into smaller, client-valued features, each representing a discrete, functional unit that delivered clear value to legal professionals and administrative staff. In this phase, the researchers organized the feature inventory into a development roadmap using Milanote. They estimated effort, analysed dependencies, and assigned features to sprints based on priority and complexity. This process supported agile tracking and reprioritization. The outputs included the Milanote feature plan, sprint schedules, risk notes, and an adaptive roadmap.

2.1.4 Design by Feature

The Design by Feature phase was a critical stage in the Feature-Driven Development (FDD) methodology, wherein each functional unit identified in the features list is subjected to detailed technical planning. This phase emphasized precision and foresight by translating abstract requirements into concrete, implementable designs. The developers take full ownership of transforming each feature into a comprehensive design package. For every feature, the researchers generated a combination of test cases, logical flowcharts, wireframes, and interface behaviour models.

The researchers also conducted participatory design sessions with stakeholders to refine UI/UX expectations and ensure alignment with actual use. Outputs from this phase included validated test case documents, user scenarios, interactive mockups, design specifications, and formal review summaries. These outputs guided the developers in ensuring each feature met functional, usability, and legal standards before the implementation began.

2.1.5 Build by Feature

The Build by Feature phase involved the iterative development and testing of individual system components, based on the design specifications established in the previous stage. This phase embodied FDD's commitment to incremental and modular development, wherein each feature was developed, verified, and integrated as a standalone unit of functionality. The researchers implemented, tested, and continuously incorporated features using agile development practices. The researchers used white box testing to ensure the correctness of the code of each feature of the system. One example of these is shown in Figure No 4, where one (1) member of the group tested the system and provided feedback. This technique was used throughout the design and development processes of OrdoLexis.

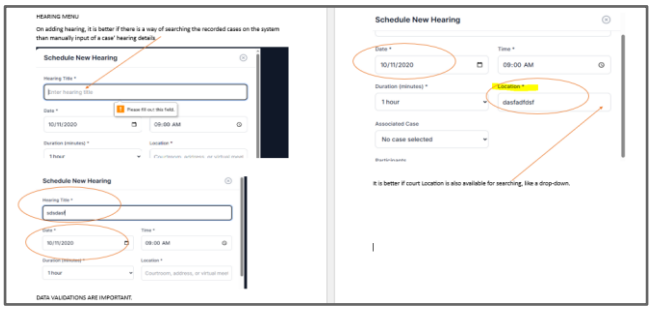

Figure 5. *White Box Testing Example*

The Computer System Usability Questionnaire (CSUQ) was selected to evaluate OrdoLexis' usability because it provides a comprehensive, reliable, and user-centered measure of system satisfaction. Developed by IBM, it assesses System Usefulness, Information Quality, and Interface Quality, which are crucial for supporting legal professionals in managing client information and case documentation. Compared to tools like SUS or PSSUQ, the CSUQ offers more detailed insights into usability factors. Its 7-point Likert scale allows users of varying technical expertise to give meaningful feedback, and its proven reliability and validity make it suitable for academic evaluation (Lewis, 2018).

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RESULTS AND DISCUSSION

This chapter discussed the results of the project, Ordolexis for Dati Law Office. Section 3.1 presented different requirements for the development of the system. Section 3.2 discussed the needed features and modules for the system. Section 3.3 showed the designs and the development of the features and modules of the system. Lastly, Section 3.3.4 showed the deployment and testing of the usability of the system.

3.1 Functional and Non-Functional Requirements for Ordlexis

The researchers made use of the user stories of the Dati Law office in identifying the Functional Requirements for OrdoLexis. Functional requirements define the fundamental structure of the system. It describes how it works which was essential in the listing of Features List for the system listed in Table 3.

Table 1. Functional Requirements

Functional Requirements	Description
User Access and Security	The system implements role-based access control for lawyers, admins, and clients. It requires secure login authentication and manages user sessions to maintain security.
Case Management	Users can create, update, and archive cases, categorize them by type, and track progress through status levels with required-field validation.
Client Management	The system keeps a centralized client database, links clients to their cases, and provides search functionality by name or case association.
Schedule and Hearing Management	Users can schedule hearings and manage court dates through a calendar interface, with conflict validation to prevent double-booking.
Case Reports and Analytics	The system generates case performance reports and analytical charts showing case distribution. It tracks success rates and key metrics, with export capabilities for external use.
Document Management	Users can upload legal documents, tag and categorize them per case, and retrieve files through search and filtering.
Notification System	The system automatically sends system notifications to lawyers, staff, or clients about upcoming hearings and deadlines.
Legal Service Management	The system manages notarization service records and supports drafting of legal documents including contracts, affidavits, and wills.

Aside from the Functional Requirements, the researchers also identified the Non-Functional Requirements that the OdroLexis needed for its development. These requirements are the usual requirements for a system to work properly and confirm the basic software requirements.

Table 2. Non-Functional Requirements

Non- functional Requirements	Description
Accessibility	OrdoLexis provides accessibility of the system at any time while there is Internet connectivity.
Availability	OrdoLexis is available on any device with internet connectivity.

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Data Integrity	The account management control provides a range of accessible functionalities to maintain the integrity of the data gathered.
Reliability	OrdoLexis was designed to meet the requirements and specifications needed by the users of the system.
Scalability	OrdoLexis was designed in a way that it can cater to a growing number of clients.
Usability	The system integrated a user-friendly design and navigation to provide easy and error-free transactions for each system user.
Security	The system implemented strong account security measures to preserve and protect the records of the system.

Both of these functional and non-functional requirements helped the researchers build the designs and then developed OrdoLexis.

3.2 Features for the Development of OrdoLexis

Based on the User's stories of the persona involved in the Dati Law Office and the functional requirements identified on Table 2, the researchers listed the Features List that would address the challenges shared by each role. The researchers also made a prioritization of the features for easier prototype or design and development activities.

Table 3. Features' List of Ordolexis

Major Feature Set	Features List	Priority Level
User Access and Security	- Role-based access control (lawyer/secretary, admin, client) - Secure login authentication - Compliance with Philippine Data Privacy Act of 2012	5
Case Management	- Create, update, and archive cases - Categorize cases by type - Track case progress and status	1
Client Management	- Centralized client database - link client to the cases - Search Clients	2
Schedule and Hearing Management	- Calendar-based hearing scheduling - Monthly calendar view - Hearing date management - Schedule conflict detection	2
Case Reports and Analytics	- Case performance and status reports - Case analytics and distribution charts - Success rate and metric tracking	8
Document Management	- Upload and organize legal documents	4

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	- Tag and categorize files per case - Document retrieval	
Notification System	- Email alert for hearings and case updates - Client appointment reminders	6
Legal Service Management	- Manage notarization records - Draft contracts, affidavits, and wills	7

3.3 Designs and Develop Features of OrdoLexis

The researchers followed the design and development of FDD which are iterative with each other. The researcher laid out the structural diagram using Use Case (Figure No 3) and the Database Diagram using Crow's foot Notation (Figure No 5). After preparing these diagrams, the researchers prepared a high-fidelity prototype per users' dashboards. This had been used as the pattern for the development of each feature identified on Table 4.

3.3.3 Developed Ordolexis

The researchers developed OrdoLexis in iterations with the design stages. The OrdoLexis was developed with distinct user interfaces designed to support the different roles involved in the legal information workflow. Each interface provides tools and features tailored to the needs of lawyers, administrators, and clients, ensuring an organized and streamlined experience for every user.

The discussion of this paper presents the features and functionalities of the developed system, which are divided into four (4) sub-sections: (3.3.3.1) the Login Page; (3.3.3.2) the Lawyer Dashboard; (3.3.3.3) the Admin Dashboard; and (3.3.3.4) the Client Dashboard.

3.3.3.1 Login Page

The login page is the entry point to OrdoLexis, authenticating users and directing them to the appropriate dashboard based on their role. Internal users—Lawyers, Admins, and Secretaries—use a login interface with email and password fields, a "Forgot Password" option, and a "Create Account" feature for new registrations.

Clients have a separate login interface, using their registered email and case code as the password. Client accounts are automatically created when scheduling a hearing, ensuring secure access to case updates, documents, and communication with their assigned lawyer, while keeping their access distinct from internal users.

3.3.3.2 Lawyer's Dashboard

The Lawyer's Dashboard is the central hub of OrdoLexis, providing an overview of key case metrics and quick access to major modules, including Cases, Clients, Hearings, Reports, and Documents. It displays totals for active and completed cases, upcoming hearings, and overall caseload, while panels for Recent Cases, Upcoming Hearings, and Recent Activity help track new entries, schedules, and system actions.

The Case Management interface (Figure 6) lists all registered cases with details such as case code, client name, type, status, and creation date. Cases are automatically grouped into categories—For Filing, Filed, For Pre-Trial, For Trial, Decided, Settled, and Closed—and updated records move to the appropriate tab. View and Edit buttons allow lawyers to access detailed information or modify case records.

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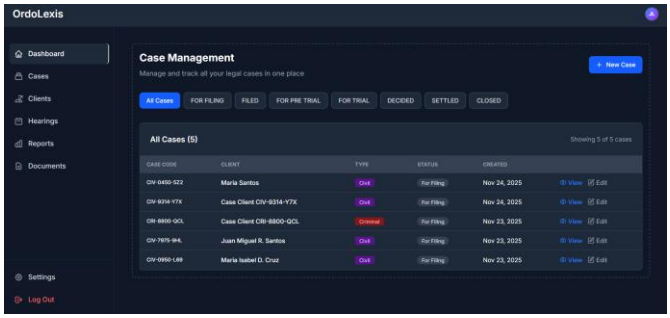

Figure 6. *Case Management*

The View Case page provides a comprehensive overview of a case, including client information, case details, trial stages, outcomes, and associated documents. Lawyers can upload evidence, affidavits, agreements, and other legal files, as well as perform quick actions like scheduling hearings or editing case details, with updates instantly reflected across the system.

Cases can be updated through the Case Management interface, allowing modification of basic information (status, client details, background, assessments) and trial details (stages, dates, actions, exhibits, witnesses, and final documents such as position papers, memoranda, decisions, and appeals). The Creating New Case interface similarly supports entering trial stages, stipulations, exhibits, witness details, and final documents, ensuring all relevant case information is systematically recorded and managed.

In Figure No 7, the first step of the New Case creation process is shown, where the lawyer selects the type of case, case status and enters the client's email address. The email entered here becomes the primary contact for automated notifications. After completing this step, the lawyer can now proceed to the next step of the case creation process.

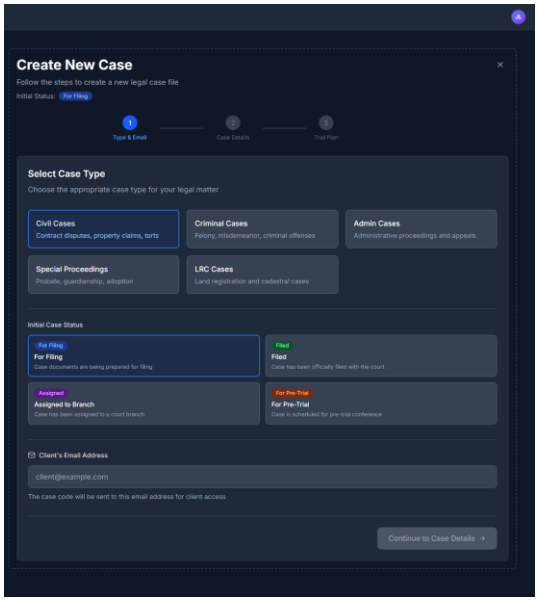

Figure 7. *Creating New Case: Type & Email*

Figure 8 shows the second step of the case creation workflow, where the lawyer enters the client's personal information (name, address, civil status, contact number) and role in the case (Plaintiff/Complainant or Respondent/Defendant). The form also captures the case background, the planned action or defense, and an initial assessment classifying the case as PMC, JDR, or Settled. Once all details are provided, the lawyer can proceed to the final step to complete case creation.

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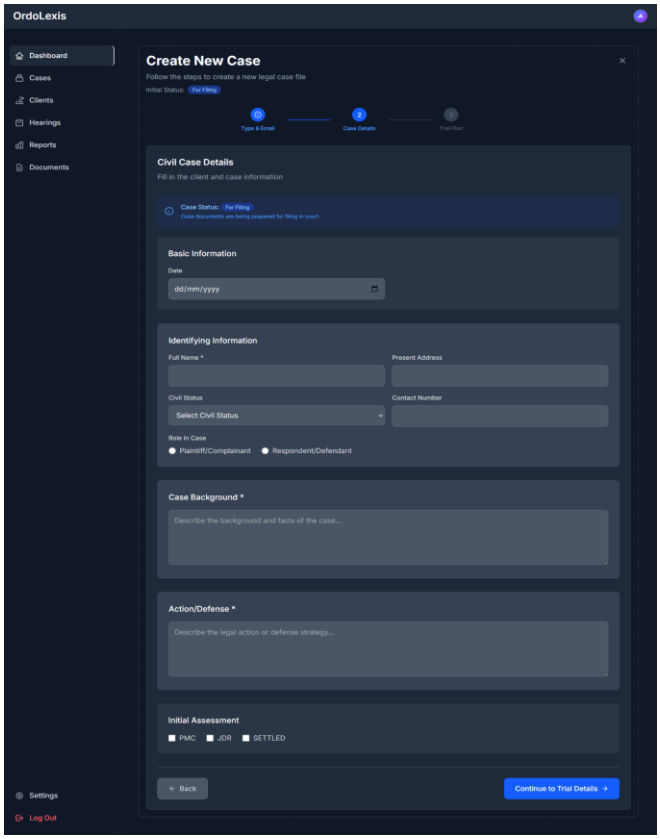

Figure 8. *Creating New Case: Case Details*

Figure 9 shows the final step in creating a new case, where the lawyer inputs the initial trial plan. This includes setting up trial stages (e.g., Arraignment, Pre-Trial Conference, Pre-Trial) with dates and actions, adding stages as needed, and completing the Case Timeline with key dates—filed, assigned, decided, and closed—providing a structured overview of case progression.

The lawyer can also enter proposals for stipulation, list exhibits, record client witnesses with their testimony dates and evidence, and upload final documents such as the position paper, memorandum, decision, and appeal. After submitting the completed form, the system automatically sends the case details and login instructions to the client's Gmail account.

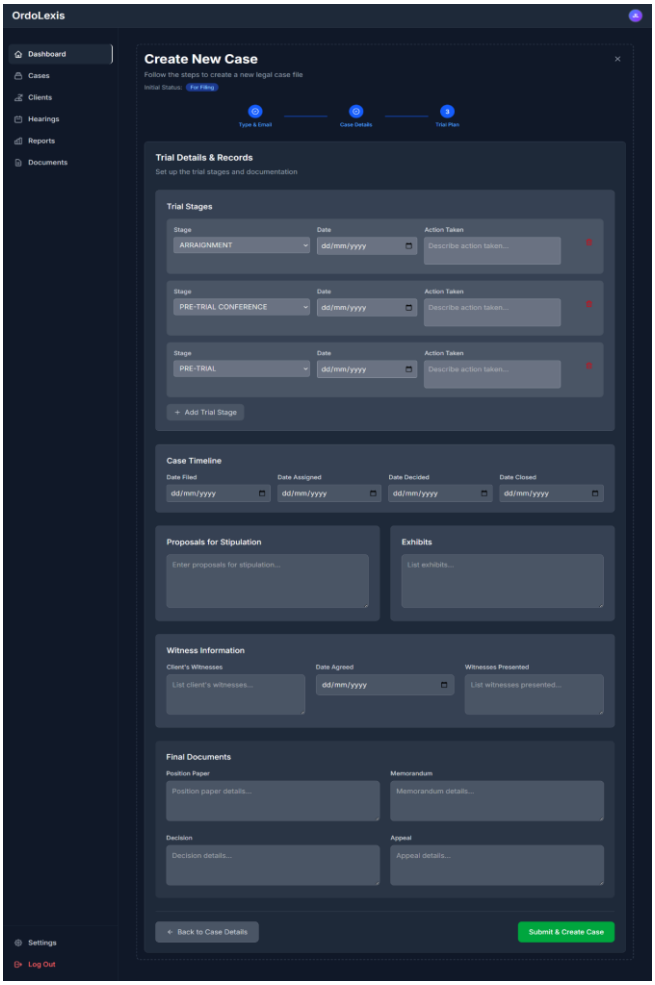

Figure 9. *Creating New Case: Trial Plan*

In Figure No 10, the Clients Management page lists all clients registered in the system, along with their contact details and linked cases. The lawyer can update client information, search for specific clients, or view their associated cases.

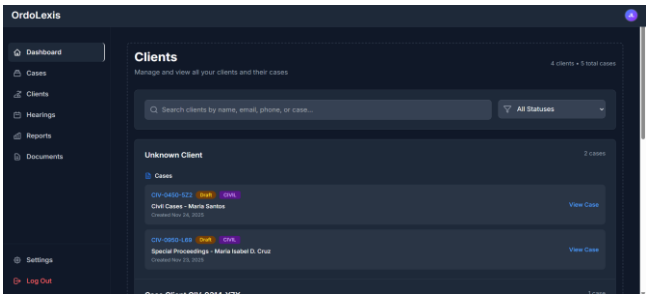

Figure 10. *Clients Management*

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Figure No 11 shows the built-in calendar system for managing hearing schedules. The lawyer can view hearings in a monthly calendar layout, with each date displaying scheduled hearings. Clicking on a date reveals the list of hearings for that specific day. This feature helps prevent scheduling conflicts and ensures that the lawyer is aware of all upcoming court appearances.

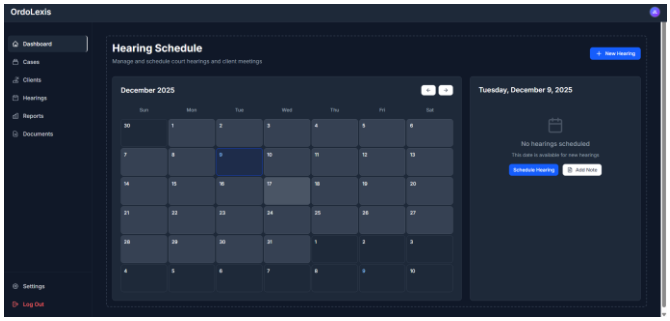

Figure 11. *Hearing Schedule Management*

As depicted in Figure No 12, the lawyer can schedule a new hearing using the "New Hearing" button in Figure No 11: Hearing Schedule Management. In the form, the lawyer can quickly search for existing cases, select the hearing date and time, specify the duration, and choose the court branch location. The lawyer can also add participants and provide a description or notes for the hearing. The system validates the schedule and checks for conflicts before saving. Once the hearing is successfully added, the client receives an automated notification about the new schedule.

After a new hearing is scheduled, it appears on the corresponding date in the calendar. Clicking on a specific day displays all hearings scheduled for that day. Each hearing entry shows the hearing details such as the name of the client, duration of the hearing, date, time, case type, and court information. This interface allows the lawyer to easily monitor upcoming hearings briefly. Additionally, the lawyer can edit or remove scheduled hearings as needed.

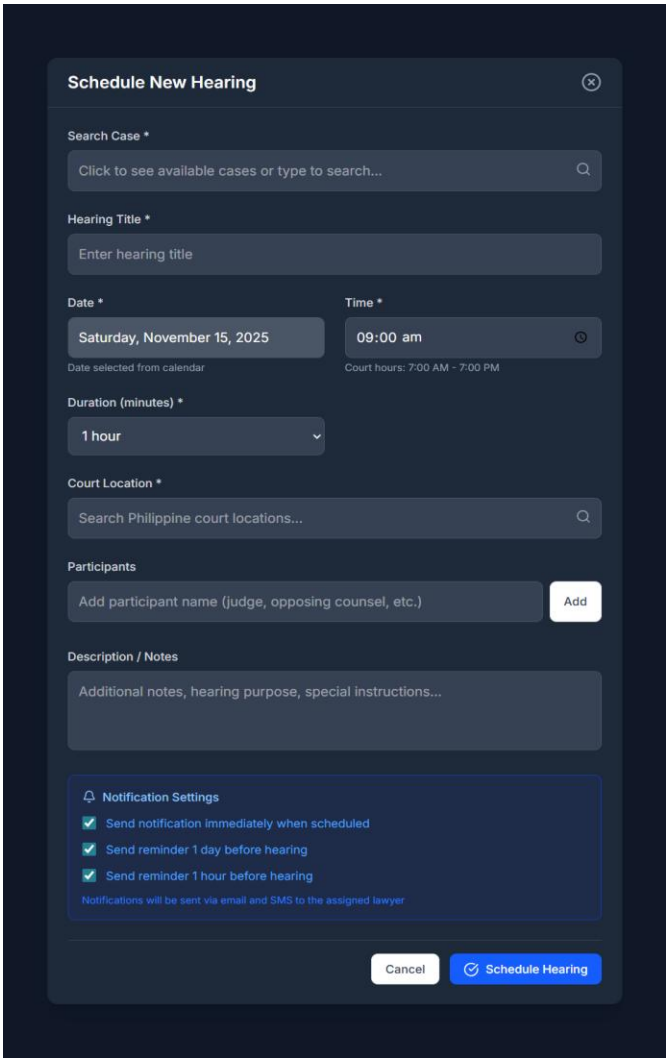

Figure 12. *Schedule New Hearing*

Figure No 13 displays the Case Reports & Analytics page, where the system generates charts and graphs summarizing the status and distribution of cases. These analytics help the lawyer evaluate workload trends, identify common case types, and assess overall performance.

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Figure No 13. *Case Reports & Analytics*

The dashboard displays key metrics, including total cases, active and completed cases, and overall success rate, providing a snapshot of the practice's status. The Case Type Distribution chart categorizes cases by type, while Monthly Case Trends track new versus closed cases. The Performance Metrics panel shows average case duration, success rate, client satisfaction, and response time. The Case Status Distribution chart breaks down active cases by stage, and the Reports section provides quick access to all system-generated formal reports.

As shown in Figure No 14, the Documents Management interface provides a centralized location for all uploaded documents. The lawyer can filter documents based on case or file type. This page serves as a digital repository, ensuring that files are stored securely and can be retrieved quickly when needed.

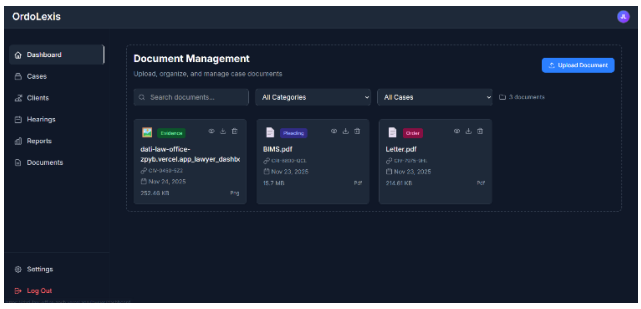

Figure 14. *Documents Management*

Figure No 15 further illustrates the upload features within the Documents Management module. Unlike the upload feature in Uploading Documents, this version includes an "Associated Case" option, allowing the lawyer to attach a file to an existing case. The lawyer selects a document, assigns it to a case, and uploads it to the system. Once uploaded, the document is immediately added to the corresponding case record.

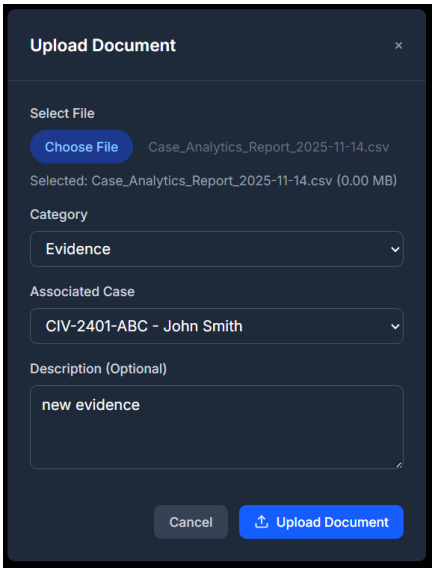

Figure 15. *Document Management: Upload Documents*

3.3.3.3 Admin Dashboard

The Admin Dashboard provides system-level users with tools for global management and oversight of OrdoLexis. Unlike role-specific dashboards, it focuses on administrative control, enabling management of all user accounts, system settings, platform activity, and data security.

As shown in Figure 16, upon login, administrators see an overview of system status and key metrics, including total registered users, pending approvals, active sessions, and security alerts, all updated in real time. The Pending User Approvals panel allows administrators to approve or reject new users.

The dashboard also includes system tools such as Maintenance Mode and Security Overview for managing platform settings and monitoring potential risks. A User Management section displays counts of banned and total users and provides a table listing all users with details and action buttons to edit or remove accounts. This

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interface serves as the central hub for controlling all users and maintaining system integrity.

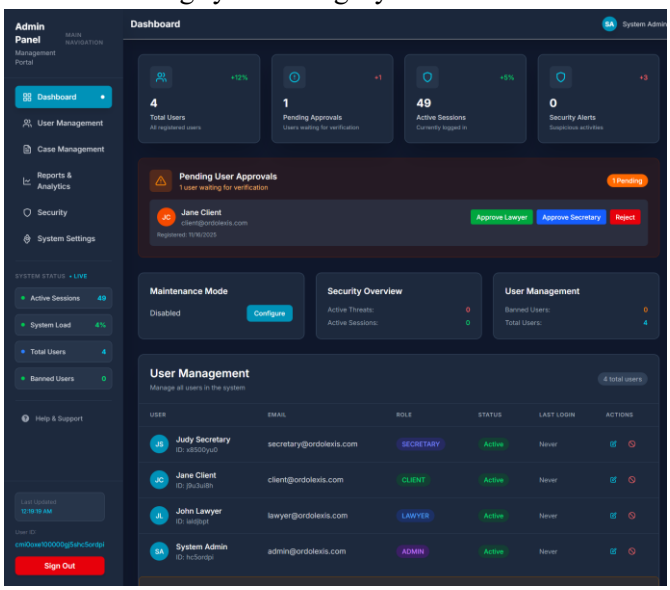

Figure 16. *Admin Dashboard*

As shown in Figure 17, the User Management page allows administrators to manage all system users, assign roles, and control access. It features an Add New User option and a Pending User Approvals panel to approve or reject role requests. A search bar and filters help locate users by name, role, or status, while the main table displays user details and provides action buttons to edit, ban, or delete accounts. This interface enables efficient user management and enforcement of appropriate roles and access.

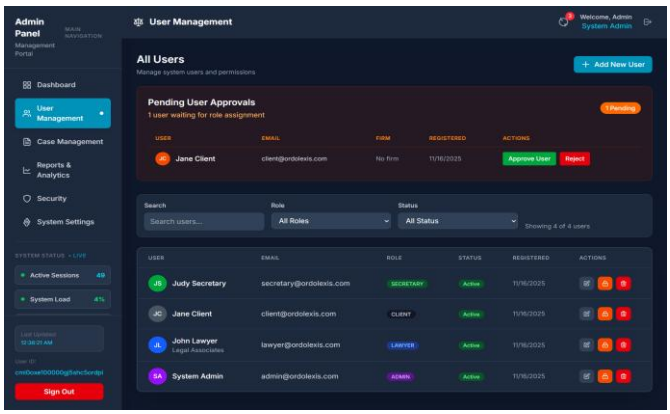

Figure 17. *User Management*

The Create New User interface appears after clicking “Add New User.” It allows administrators to register new users by entering their email, name, and role (Client, Lawyer, Secretary, or Admin), with an optional firm name for legal organizations. A “Ban this user” option is also available to restrict access if needed, ensuring accounts are created with the correct roles and credentials.

The System Settings interface allows administrators to manage data security and system maintenance. It supports full or selective backups (database or files), configurable automatic schedules (weekly) with 30-day retention, storage management, and system reset functionality.

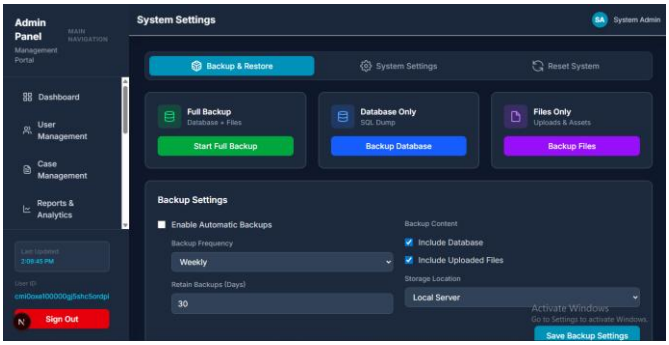

Figure 18. *System Setting*

3.3.3.3 Clients Dashboard

The Clients Dashboard is the central hub for clients in OrdoLexis, providing an overview of case summaries, upcoming hearings, and available documents. It also offers access to core sections Case Overview, Court Hearings, Documents, and Messages allowing clients to efficiently track their cases and communicate with their lawyer through a single, user-friendly interface as shown in Figure No 19.

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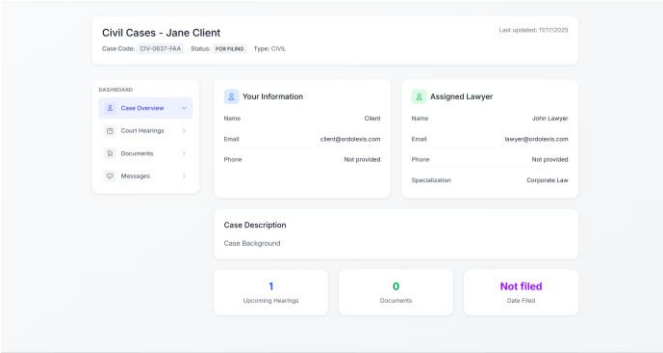

Figure 19. *Case Overview*

3.4 Deployment and CSUQ Testing Result of OrdoLexis

The researchers deployed OrdoLexis online for the users to be able to access the testing process. Section 3.4.1 describes the deployment of OrdoLexis, and Section 3.4.2 discusses the CSUQ testing results of the system.

3.4.1 Deployment

The OrdoLexis was deployed online and requires a set of hardware and software requirements. The online deployment is depicted through Figure 20, and the Hardware and Software Requirements are shown in Table 5. These deployment requirements enabled the researchers to deploy OrdoLexis for the testing phase procedure.

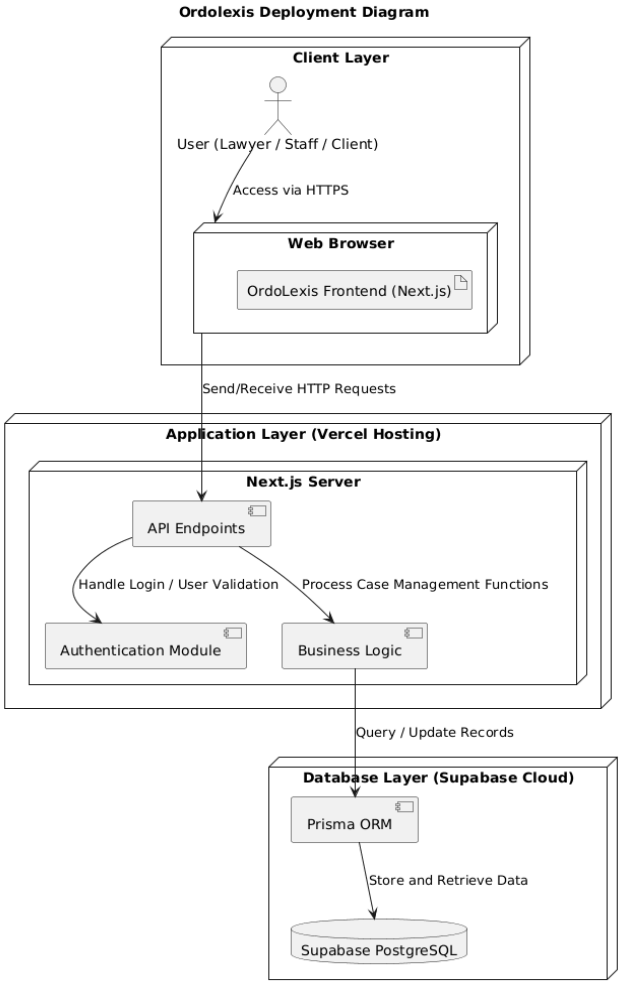

Figure 20. *Online Deployment Diagram*

3.4.2 CSUQ Testing Result and Interpretation

The researchers adapted the 19-items CSUQ to validate the system's usability. For items 1- 8, it measures the System's Usefulness (SysUse) as perceived by the users defined in 2.4.2. Items 9-15 also measures the Information Quality (InforQual) of the OrdoLexis provided. Items 16-18 measures the Interface Quality (InterQual) while item 19 measures the perceived overall usability of the System. To compute for the weighted mean, the formula was used:

$$\text{Weighted mean} = \Sigma(w)n\ (\bar{x})n/\Sigma(w)n,$$

where: Σ means summation, $\bar{x}$ = the mean value of the set of given data and w = corresponding weight for the

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criteria, n the sample size (17) The individual WM of the 19 items were calculated. Before doing such, the researchers also tallied the responses (Frequencies) of responses per Likert Scale (1-7) for easier calculation. The result is shown in Figure No 21.

CSUQ Scale	CSUQ Response Requency per Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	1	0	0	2	2	0	0	0	0	0	0	0	1	0
5	1	3	4	3	4	3	2	2	6	3	3	2	1	0	3	1	0	2	1
6	12	8	10	11	7	8	10	9	6	9	12	11	11	12	9	8	10	7	11
7	4	6	3	3	6	5	5	6	2	3	2	4	5	5	5	8	7	7	5
WM Score	6.18	6.18	5.94	6.00	6.12	6.00	6.18	6.24	5.35	5.76	5.94	6.12	6.24	6.29	6.12	6.41	6.41	6.18	6.24

Figure 21. *CSUQ Response Result*

After calculating the CSUQ WM scores per item, the researchers determined the scores of the four (4) areas of CSUQ shown in Figure No 21. The interpretation follows the following interpretation guide (Acala & Talirongan, 2023) expressed in Table 4:

Table 4. Interpretation Guide

Likert Scale Interval	Description
1.00-1.75	Strongly Disagree
1.76-2.62	Disagree
2.63 - 3.49	Somewhat Disagree
3.50 - 4.36	Undecided
4.37 - 5.23	Somewhat agree
5.24 - 6.10	Agree
6.11 - 7.00	Strongly Disagree

The results are as follows:

Table 5. CSUQ Response Interpretation

Areas	WM Result	Descriptive Interpretation
System Usefulness (SysUse)	6.10	Agree
Information Quality (InforQual)	5.97	Agree
InterfaceQuality (InterQual)	6.33	Strongly Agree
Overall Satisfaction	6.24	Strongly Agree
Overall CSUQ Score	**6.16**	**Strongly Agree**

The results show that Interface Quality received the highest rating, indicating that clients strongly agree the system's interface effectively supports their tasks. System Usefulness and Information Quality also received positive ratings (Agree), meaning the system is considered helpful and produces reliable information. Overall, respondents perceived OrdoLexis as highly usable and beneficial for its users.

Qualitative feedback highlighted the system's design as its most positive aspect, emphasizing user-friendliness, easy navigation, and overall good design. No significant negative remarks were reported. These findings confirm a high level of perceived usability for OrdoLexis (see Appendix E for full details).

CONCLUSION

The design and development of OrdoLexis began with clearly identifying its functional and non-functional requirements through interviews, observations, and document analysis. These insights formed the foundation of the system and shaped its direction.

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Building on these requirements, the researchers developed a refined feature list that outlined the system's core capabilities and guided the creation of user-specific modules. This provided a clear roadmap for how each part of the system should function.

Prototyping and software development then progressed using UML-based behavioral and database designs, which strengthened the system's structure. The iterative approach minimized errors and rework, allowing the team to develop features more efficiently and ensure they aligned with user needs.

The CSUQ usability assessment supported these outcomes by confirming that the system met its intended requirements. With an overall score of 6.16 ("Strongly Agree"), the evaluation reflected high user satisfaction and strong perceived usability.

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