EduManage.NET: An Application for Foreign Language Course Management on the WPF Platform

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***Abstract*—EduManage.NET is a Windows desktop application designed to manage foreign language courses. This thesis describes the requirements, design, implementation, and functional testing of the application. The system uses C# and Windows Presentation Foundation (WPF), applies the Model-View-ViewModel (MVVM) pattern, and stores operational data in SQL Server. The requirements cover courses, classes, learners, instructors, enrollment, schedules, grades, user accounts, and notices. The author presents role-specific interfaces and implements course and learner management, course registration, and status announcements. Functional verification includes black-box and boundary-value test cases. The thesis reports a working application and interface screens, but it does not provide an independent deployment study or quantitative usability or performance measurements. Online tuition payments, e-learning delivery, and a web or mobile client are outside the implemented scope. The proposed extensions include payment integration, course recommendations, and additional platforms. The contribution is a documented desktop prototype and an account of the design and testing choices for this course-management setting.**

***Index Terms*—EduManage.NET, WPF, course management, MVVM, software testing**

I. Introduction

Foreign language centers must coordinate courses, classes, learners, instructors, schedules, and registrations. The thesis sets out to consolidate those operations in a desktop application named EduManage.NET. It defines a system for distinct administrator, instructor, and learner roles, while keeping online payment and e-learning outside its scope. The source describes current management difficulties and uses them to specify the screens and operations that the proposed application should support. The project is framed as a local course administration system, rather than a general learning platform [1]. Published books on the methods and subject of this project provide context for this English summary [4].

II. Methods

The implementation uses C# with WPF for the interface and SQL Server for storage. The described architecture follows MVVM, separating views, view models, and data objects. The author analyzes role-specific requirements, models course and class management, and implements enrollment, announcements, schedules, and grades. Functional checks use black-box cases and boundary-value cases; the source documents interface screens and example test scenarios [1].

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III. Results

The reported prototype includes course-list administration, learner information, registration, notices, and role-specific views. The source displays application screens and functional test cases. It also describes class assignment, schedules, and grade tracking within the requirements and interface design. These establish that the functions were exercised in the author's development setting; the thesis does not report a measured improvement over an existing process or a deployment with real institutional users. No quantitative performance or usability measures accompany the screenshots and functional checks [1].

IV. Discussion

A desktop WPF design supports the documented local workflow but does not provide a browser or mobile client. Online tuition payment and e-learning are explicitly excluded from the implementation. The thesis suggests payment integration, personalized course recommendations, and cross-platform versions as future work, so they should not be read as delivered features. Because the source assesses the application chiefly through functional cases and interface evidence, reliability under concurrent use and suitability for real institutional deployment cannot be inferred from the report [1].

V. Conclusion

The thesis documents the development and functional checking of EduManage.NET, a WPF and SQL Server prototype for foreign language course administration. Its reported functions address courses, learners, registrations, and notices. The source provides application screens and functional test scenarios, but no field evaluation or measured performance comparison. Further deployment and empirical evaluation remain open, alongside the proposed payment, recommendation, and cross-platform extensions [1].

References

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