Design Prospectus

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Prospectus: Design Project for Court Building Room Management

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Introduction

The following design prospectus is created to illustrate the intended project which will be designed, implemented, evaluated and submitted as a requirement for the course EDID6512 Design Project. It is hoped that the project advisor gets a clear understanding of this designer's intention for the duration of this course. Mastery of the technology used in the high court has been a challenge for some Court staff. Judges in Barbados are calling for less archaic systems and ways of conducting court business and matter as country embarks on journey as a Republic Nation. Judges and Magistrates prefer to have their courts function and maximize on time.

The social landscape of society has changed and laws have been amended to reflect such considerations in society among them are the o laws to reflect the changes in our modern and functional society where technology is integrated. A few of those include The Computer Misuse Act, Intellectual Property Act, Data Protection Act, Education Act,Public Service Act, Data Protection Bill, Disability act with United Nations, and more recently,The protection of the child ACT encompassing Revenge Porn Act their data under the EMIS Policy all of which have an impact on the   guidelines on the maintenance , delivery, storage and presentation of data and files within f the Halls of Justice and directly associated personnel .

The need for this design project is to create an application that efficiently manages the allocation of courtrooms in a court building. The intended audience for this application includes court administrators, staff members, and judges who are responsible for managing and scheduling the room allocations in the court building.

In modern court systems, efficient management and allocation of rooms within court buildings are crucial for smooth operations. However, many courts still rely on manual processes, leading to inefficiencies and logistical challenges. To address this issue, this instructional design course proposes the creation of an application tailored for managing and allocating rooms in a court building. This prospectus outlines the need for such an application, identifies the target audience, provides a theoretical foundation, offers supporting literature, and examines existing software solutions in the field.

Identification of Need and Intended Audience:

The need for a specialized application for court building room management stems from the following factors:

- Resource Optimization: Effective utilization of courtrooms, meeting rooms, and other facilities within court buildings is essential to streamline operations and maximize resource allocation.

- Scheduling Challenges: Manual scheduling processes often lead to conflicts, double bookings, and delays, impacting the efficiency of court proceedings and administrative tasks. Back logged cases of over 10 years result in criminals being set free at the expenses of citizens .Persons who have been charged and have not had their cases heard within a ten year period are then entitled to sue the crown and claim millions of dollars in restitution damages. As recently as two months ago a former inmate was found not guilty under the same circumstances and successfully sued the crown and was awarded damages

of over $500,000.00BDS.This money will be paid by the tax payers.The situation has left

the electorate in a state of outrage.

- Security and Access Control: Ensuring proper access control and security measures for

  different rooms within court buildings is paramount to maintain confidentiality and

  uphold the integrity of legal proceedings.

- Data Management: Centralized storage and management of room-related data, including

  availability, usage history, and maintenance schedules, are critical for informed decision-

  making and audit trails. Additionally, Magistrates and Judges are calling for more

  advanced technology to be used in the court system to mitigate the backlog of criminal

  cases within the lower courts - the backlog has birthed a more novel problems where the

  state's purse may be at stake.

The intended audience for this instructional design course includes:

Participants are between the ages of 25 and 60 years. There are 25staff in total who

service the judiciary at the Lester Bird Supreme court. There are 10 females and 15 males . 5%

have a background of basic technology . The other members are not savvy beyond using the

WhatsApp on their mobile devices to plan and coordinate information among each other .The

goals include at least 40% improved efficiency within the court system and courtroom with

information linking to court calendars for court dates .

- Instructional designers seeking to develop skills in designing applications for specific

  organizational needs.

- Court administrators and personnel responsible for facility management within court

  buildings.

- IT professionals interested in developing software solutions tailored for legal institutions.

Persons working within the courts are expected on all levels to

- keeps and maintains "electronic" the records and seal, issues processes, enters judgments and orders, and gives, upon request, certified copies from the records.

- accounts for and manages all equipment within said court (such as microphones, quality of video and audio evidence submitted to the court, laptops, recording equipment , stenography equipment ,laptops, projectors.

- mandates that they be an individual of competence, honesty and integrity. In relation to the Judge, said officer occupies a position of confidence which should not be betrayed. With the prestige of the office goes the corresponding responsibility to safeguard the integrity of the Court and its proceedings, to earn respect therefor, to maintain loyalty thereto and to the Judge as the superior officer,

- to maintain the authenticity and correctness of Court records,

- and to uphold the confidence of the public in the administration of justice.

- Court employees to act speedily and with dispatch on their assigned tasks to avoid the clogging of cases in Court and thereby assist in the administration of justice without undue delay.

- support activities to improve judiciary services.

Literature Review and Theoretical Foundation

To provide a solid theoretical foundation for this design project, a comprehensive literature review will be conducted. The review will focus on instructional design principles, room management systems, and court administration. A minimum of ten academic references will be used to support the project, including research papers, articles, and books on instructional design, facility management, and court administration. The literature review will explore topics such as instructional design theory, user-centered design, space management, and best practices in court administration.Additionally, driving the research design process for this project are the following theories and models and approaches: Cognitive theory of Multimedia Learning (CTML)and Experiential learning.By applying instructional design methodologies, such as the ADDIE model (Analysis, Design, Development, Implementation, Evaluation), designers can systematically develop technology solutions that meet the specific needs of courtrooms. Additionally, principles of user-centered design and human-computer interaction ensure that IT solutions are intuitive, effective, and user-friendly for court personnel and administrators.(Baca, D., & Schwabe, G. (2017) Baca and Schwabe expounds as this study highlights the need for digital transformation in the judiciary to improve efficiency and effectiveness. It emphasizes the importance of IT integration in courtroom management processes, including room allocation and scheduling.

ADDIE Instructional Design Model

According to Kurt (2015) an "instructional design model provides guidelines to organize appropriate pedagogical scenarios to achieve instructional goals" (p. 2). This model has proven to be successful and effective ininstructional design because it is consistenly associated with quality design, a clear objective, carefully structured content, integration of media, promoting student engagement through the use of activities, and is strongly tied to learning

outcomes and assessments. The effectiveness of the ADDIE model is it is a very useful

management tool, allowing for the design and development of courses with standard and high

quality. (Aldoobie, 2015).

Smith and Ragan (2004), poists that this design model is used by instructional designers for

technology-based teaching and development. With the constant changes in the instructional

environment and the emerging technologies and instructional development tools, the ADDIE

model is more adaptable to today's instructional environment.

Gasser, U., & Cortesi, S. (2017)discuss how technology can enhance access to justice by

streamlining courtroom management tasks, such as room allocation and scheduling. They

advocate for the development of IT solutions tailored to the needs of legal institutions. This is

further compounded by Hall, M. A. (2018), the article highlights the impact of digital

technologies on judicial decision-making processes. It underscores the importance of IT

integration in courtroom management to support judges and court personnel in their duties,

including room allocation and scheduling.The concept of "justice as a service" and discusses the

role of AI and IT in the administration of justice is highlighted in tandem with the potential of

technology to optimize courtroom management processes, including room allocation and

scheduling.Hildebrandt, M. (2019). Insights into future trends in courtroom technology are

examined in articles by Johnson, J. B., & Fain, M. (2016). "Technology and the courts: A look

ahead." and it emphasizes the need for IT solutions to support courtroom management functions,

such as room allocation and scheduling, to adapt to evolving legal environments.(Johnson, J. B.,

& Fain, M. (2016)

Instructional design principles provide a comprehensively robust theoretical foundation for the

integration of IT into courtroom management and is supported by Gasser, U., & Cortesi, S.

(2017). "Improving access to justice through technology." In this article the authors discuss how technology can enhance access to justice by streamlining courtroom management tasks, such as room allocation and scheduling. They advocate for the development of IT solutions tailored to the needs of legal institutions.

There is a need for court staff to be trained in this area as judges have expressed a preference in having technologically savvy personnel in their courts to ensure speed and efficiency. This perspective is widely shared as Schulz, K., & Vis, B. (2018) posits in the journal "The digital courtroom: A conceptual framework." *International Journal for Court Administration* that this conceptual framework provides a comprehensive overview of the digital courtroom concept as it showcases key components and functionalities, including IT solutions for room allocation and scheduling, to guide the development of technology-enabled courtrooms.

Nally, B. J., & Miskell, M. E. (2019) analyzed technology use in courtrooms.It was a comparative analysis that examined technology use in courtrooms across different jurisdictions. In many ways it confirmed the need for standardized technological solutions to support courtroom management functions, including room allocation and scheduling, to ensure consistency and efficiency.

Cognitive Theory of Multimedia Learning (CTML)

Central to the design of this designers proposed solution is the principle known as the "multimedia principle" which states that people learn more deeply from words and pictures than from words alone. Richard Mayer outlined that there are two separate channels for processing information, that of the auditory and visual channels. Mayer continued to purport that each channel has a limited or finite capacity and that learning is an active process of filtering, selecting, organizing and integration information based upon prior knowledge (Mayer,

2009). There are three memory stores are presented: sensory memory; which receives stimuli for

a short span of time, working memory which actively processes information creating mental

constructs also called schema and long-term memory where all things are learned and stored.

The belief is that attention on relevant words and images creates connections in the

working memory. Connections are established among selected words or images

thereby creating a mental model, which then integrates with one's prior knowledge for a better

understanding. The proposed e-lesson therefore intends to balance the use of visual and verbal

information in the hopes of engaging the learning in the learning process. It will include

strategically selected descriptive text, diagrams, pictures and videos that will actively stimulate

the mental constructs of the participant . There will also be aspects of twelve principles of

multimedia design woven into the e-lesson with respect to the learners understanding the

instructional multimedia piece. This is usually achieved when the lesson is broken into user-

paced chunks rather than all in one multimedia piece known as the segmenting principle.

Experiential learning theory

David Kolb's learning theory is concerned with the participants internal cognitive

processes. The knowledge garnered by way of engagement and experiences while on the job can

be applied flexibly in a range of scenarios through new experiences. Adult learners respond well

to this type of training. This e-lesson will be a novel experience for them as they engage

in audio-visual content, and can become a transformational experience. Against the backdrop

of Kolb's four stage participants will 1) have a solid experience 2) review or reflect on the

experience 3) learn from the experience and 4) be able to try and practise what they have

learned. The e-lesson will provide opportunities for participants to experience all four stages.

Examples of Existing Solutions Software for Court Building Management:

Several existing software solutions address the management of court buildings and facilities.

Given my intended design, consideration could also be given to the following existing

solutions:Examples include:

- C-Track is a web-based court management platform that automates court workflow for

   increased efficiency. It optimizes day-to-day court operations, including case processing,

   encoding of case information, presiding over hearings supporting court technology, and

   interacting with courts on a regular basis. Its most favourable characteristic is that

   it easily adapts to the unique rules and critical processes of your local court. C-Track

   easily integrates with other internal and external systems, thus providing streamlined

   workflow and faster case processing. Key characteristics and features include

- Advanced rules engine
- Calendaring and scheduling
- Electronic court docket
- Case information
- Case relationship management
- Security and access level restrictions
- Web-based platform

- CourtView: CourtView offers comprehensive case management software tailored for

   courts and legal institutions. While its primary focus is on case management, it also

   includes features for scheduling courtrooms and managing other facilities within court

   buildings.

   Justice Systems Management Suite: This suite of software solutions provides modules for

   various aspects of court management, including case management, financial

   management, and facilities management. Its facilities management module offers tools

   for room scheduling and resource allocation within court buildings.

- OpenCourt: OpenCourt is an open-source project aimed at increasing transparency and

  accessibility in court proceedings. While its primary focus is on livestreaming court

  hearings and providing public access to legal proceedings, it also includes features for

  managing courtrooms and scheduling hearings.

- CourtReserve: A web-based application that facilitates the scheduling and allocation of

  courtrooms, judges, and other resources. It provides real-time updates and notifications,

  allowing for efficient management of court resources.

- Judici: An online platform that allows court administrators to manage case information,

  scheduling, and courtrooms. It offers features such as document management, case

  tracking, and integrated calendaring.

- ClerkWorks: A comprehensive court management system that handles case management,

  room allocation, scheduling, and document storage. It provides customized reports and

  integrations with other court systems.

These existing software solutions will serve as references for the design project, helping to

identify essential features, functionality, and user experience considerations.As the above

examples illustrate, there are other solutions that are similar to my proposed design. All are

available as a paid monthly subscription with special options for governments and countries with

unique laws.

Course Overview:

This instructional design course will consist of lectures, hands-on exercises, and a design project

focused on developing the court building room management application. Key topics covered in

the course include instructional design principles, user-centered design methodologies,

information architecture, usability testing, and project management techniques.

To provide a theoretical foundation for this instructional design course, the following key

concepts and theories will be explored:

- Instructional Design Models: Understanding instructional design models such as

  ADDIE (Analysis, Design, Development, Implementation, Evaluation) and SAM

  (Successive Approximation Model) to guide the systematic development of the

  room management application.

- User-Centered Design: Incorporating principles of user-centered design to ensure

  that the application meets the needs and preferences of its intended users,

  including court personnel and administrators.

- Usability Testing: Implementing usability testing methodologies to gather

  feedback from end-users and iteratively improve the application's usability and

  effectiveness.

The Design Idea and description

My project proposes to come up with a tool to remedy the aforementioned problem of

managing court rooms among the judges and their respective courts within the Lester Bird

Supreme Courts of Barbados.

The design project will involve the following stages:

- Needs Analysis: Conducting a thorough needs analysis to understand the requirements

  and challenges associated with managing and allocating rooms in a court building.

- Design Conceptualization: Developing design concepts and prototypes for the room management application based on user feedback and best practices in instructional design and user experience design.A self paced e-lesson will be designed. This tool will include a menu of options which will provide content on the data entry of court dates. This will be presented in a series of slides that provide information about each topic using Google classroom . Participants will be able to view and listen to examples and YouTube videos will be embedded to help explain certain topics of interest.

- Based on the theories of learning, experiential learning and just in time learning an e-lesson is considered among the proposed solutions. A description of the proposed design and explanations on how e-lesson supports them.. Additionally similarities and differences between the proposed design and existing solutions is also part of this paper . This will form part of the evaluation and Design Project Report which will be submitted in the future at the end of the course.

- Prototype Development: Building a functional prototype of the application using appropriate software development tools and technologies.

- Usability Testing: Conducting usability testing sessions with end-users to gather feedback and identify areas for improvement. It has been proposed that a two-hour orientation course be created . This orientation course would provide both informational and practical support to court staff guiding them through their responsibilities, the support resources, reporting mechanisms and policies that they will be adhering to within the role. The orientation is expected to be delivered using Google Classroom which is the standard Learning Management System utilized by all primary schools across the island

during the pandemic and 85% of the court staff expressed a working understanding of

how to best navigate using the platform after being taught. participants should be

relatively comfortable with navigating and operating within the platform. The classroom

will contain all the tools, software, templates and guides that are needed for the target

audience to get started in a sequential order. If a participant goes through the first phase

of their orientation by watching the videos, reviewing the materials, they should take

approximately one hour. After the participant has reviewed the materials in the

classroom, they view the self paced lecturers .After the practical session, the Court

staff should be ready to complete a quiz in the Google Classroom to ascertain whether

they have understood the orientation materials and training. Based on the results of the

quiz, the will determine how often, they will need to liaise and monitor the progress of

the Court staff over the courts   calendar year to ensure that the standards are met, so that

they are better able to perform their duties well.

- Refinement and Finalization: Iteratively refining the application based on user feedback and finalizing the design for deployment.

Training Goals

1. To introduce Court staff to technology - the structure, importance, philosophy, purpose, values, and standards

2. To equip Court staff with the knowledge, resources and guidelines regarding policies, procedures, standards and expected performance that helps them integrate smoothly and quickly into their role.

3. To promote communication between the Court staff in relation to courtroom management of rooms

4. To provide an analysis of the skill level of Court staff on the level of monitoring that will be necessary to ensure standards are met

Learner Analysis

Court staff serve the judiciary of Barbados to increase the technology integration in the courts to to improve the management and accessibility of data within the courts Historically, many are used to on the job training in the form of workshops .The preferred candidate is someone who has exceptional communication, interpersonal and organizational skills, a willingness to learn and integrate new technologies, and be able to train and encourage regular court staff to integrate technology in training and learning.

In Barbados, the typical Court staff personnel is between 25 and 45 years of age and can be either male or female. The learners typically are of Afro-Caribbean decent with a background in receiving face-to-face instruction with some exposure to online learning, mostly due to the COVID-19 emergency remote learning experience.   The online component of the training course will be available to anyone within the court staff personnel. This means that the materials will align with a national reading and comprehension level of an adult and content will be suitable for an individual with at least a working understanding of data entry and basic to intermediate levels of in Information Technology or data entry. In order to account for some disabilities such as hearing or vision challenges, the course will be developed with materials that can be access both visually or audibly. The course will also have a practical face-to-face component to address the varying learning styles of adults.

Contextual Analysis

The first stage of the orientation course will be accessible through Google Classroom. The learners will be provided with a laptop computer to access this course and as well as access to the internet. The course will be available once deployed 24 hours a day and therefore users can access the course during working hours and outside of working hours. Barbados boasts that 82% of the population have access to internet, typically either from their work, community area or their home (Statista, 2022). This should allow users no hindrances with regard to accessing the course. It will be advised that the learners choose an appropriate place while they access the content that has adequate lighting and as little distractions as possible.

The second phase of the orientation course will be face-to-face during working hours at the Lester Bird Supreme court where the court staff can use the courtrooms. Each court is fully equipped as a 20th century courtroom with computers, chairs, tools, and access to the internet. The practical one-on-one session should be conducted in the court rooms of the Supreme Courts . Factors that may influence the instructional environment include noise from neighboring construction , requests from other team members such as Legal secretaries, paralegals and clerks or the Registrar to access equipment. Other considerations that may affect the instructional environment would be the scheduling of a time for the practical component as Scheduling may also be a factor for other clerks and judges desirous of using the assigned courtrooms for their regularly scheduled hearings .

Conclusion

In an attempt to address the issues , a self paced e-lesson is the proposed solution.
Various audio and visual content and supportive links will be included to aid learners. The
design will include attributes of experiential learning, just in time learning , and multimedia
learning all in an attempt to create an environment that will promote learning and improve the
electronic record scheduling keeping and handling of data within the Supreme Courts of
Barbados.Efficient management and allocation of rooms within court buildings are
essential for the smooth operation of legal proceedings and administrative tasks. By
leveraging instructional design principles and user-centered design methodologies, this
instructional design course aims to develop a tailored application to address the speIn
his foreword to the Manual, Chief Justice Fernan hailed it as a "major achievement in the
Judiciary's reform program" and a "great contribution in our quest for an improved
administration of justice."The Manual- training for Clerks of Court remains an important
component for a constantly improving Judiciary. With various developments in the Judiciary, not
the least of which is the institutionalization of a Judicial Reform Program, the need to revise the
1991 Manual for Clerks of Court became evident. In January 2001, the Chief Justice issued
Administrative Circular No.4-2001 creating an *Ad Hoc* Committee for the Revision of the
Manual for Clerks of Court.This afforded them convenience and facility in the execution of
ordinary and special tasks.The modified Manual, aptly called *The 2002 Revised Manual for
Clerks of Court,* which the Committee has prepared, greatly deviates from the 1991 version. The
latter emphasized the functions and duties of clerks of court according to types of cases and
stages of trial court or proceedings. Under the current administration in Barbados in accordance
with the need to satisfy the United Nations 2030 Sustainable goals and the cries of the
electorate Barbados in accordance with the aforementioned revised laws

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