**The COSC 205/224 Projects  
(\*updated 30 January 20­­­­24)**

**List of the Projects \* - indicates project description not finalized.**

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| # | **Project Name & a Short Description** | **Complexity (High/ Low)** | **Local?** |
|  | **Novel Data Visualization (DViz)**  **Background Information:** The client is a data intelligence company that services utilities as a decision management, meter data management, and customer engagement entity. We enable our customers to maximize return on investment in smart infrastructure through leveraging intelligent, data-driven analytics. To maintain our best-in-class analytics solutions, we are continually seeking and developing cutting-edge tools that supplement our analytics suite. In support of this effort, we believe that data visualization is a strong tool in facilitating understanding of complex analytics that does not necessitate deeper understanding of the data at a “down to the numbers” level for the end user.  **Project Main Objective(s):** Students will aid in researching, creating, animating, testing, and validating novel visualizations of smart meter data. Currently, we are internally targeting the creation of the following charts, with animations where applicable:   * Sanke charts * 3D Surface * Bubble map * Combo charts (combinations of different kinds of charts) * Line charts with continuous error bars * 2D Histograms * Waterfall   With guidance from the client, students will be free to develop additional visualizations that have a demonstrable business use case for our customers. They will work with our technology stack (Java, JS, JSP, PostgreSQL, D3.js) to accomplish these goals, specifically being asked to utilize our custom D3-based library.  From this work, students will gain real-world experience in developing and integrating software for a large software-focused company. They will practice Agile frameworks used in industry that they have learned about for several years. Students will be encouraged to explore other visualizations outside of those that the client company currently offers or that are already in development in the project. They will be given guidance in software design principles including direction and requirements from a Product Management coordinator. Examples of principles include detailed requirements from Product Management provided to developers (students), User First User Experience design (user stories and workflow over feature focus), and ADA (Americans with Disabilities Act) Compliance, among several others.  Ideally, we want to get something that is visually appealing and sellable while facilitating some real-world software development procedures for students to build a basis for career growth. Former Okanagan College students have been hired on with the client organization as a result of these software projects and that pathway still exists today for students that demonstrate exemplary performance, vision, skills, and leadership.  **Project Main Deliverable(s):** Students will deliver completed and tested code that produces the outlined and any further visualizations.  **Special considerations (equipment, location, constraints, existing material…):** Students will provide their own hardware and will work remotely, as the client is a fully remote and geographically distributed company. The primary contact is open to travelling to meet with the students in person in Kelowna occasionally should it be desired. Students must develop all materials using the client’s code stack (Java, Javascript, JSP). Chart generation will be carried out using our in-house library so as to seamlessly integrate into our current technology stack.  **Industry Contact Information:**  Proposed By: Dakota Joiner, Harris SmartWorks  Company Address: 1 Antares Dr #400, Nepean, ON K2E 8C4  Email Address: djoiner@harriscomputer.com  Company Phone: +1 (613) 696-0125  Company Website: <https://harrissmartworks.com/> | L | N |
|  | **Analytical Appointment scheduling application for Healthcare integrated with an LLM**  **Background Information:**  The aim of this capstone project is to develop an innovative appointment scheduling application integrated with a sophisticated language model chatbot tailored for medical clinics. The application intends to revolutionize the conventional scheduling process by leveraging advanced machine learning tools to understand patient needs from natural language conversations. By seamlessly integrating with an existing LLM model, the system will automate appointment scheduling, capture detailed patient symptoms, track visit frequencies, and personalize treatment information, thereby enhancing the efficiency of medical professionals and receptionists.  **Project Main Objectives:**  The primary goals of this project include:   * Development of an intelligent appointment scheduling application. * Integration of the LLM model to comprehend patient needs. * Implementation of machine learning tools for data analytics. * Automation of appointment scheduling and follow-up processes. * Collection and analysis of patient symptoms, visit frequencies, and personalized treatment information. * Creation of a user-friendly interface supporting speech-to-text and text-to-speech capabilities for easy appointment scheduling through audio. * Provision of mobile accessibility with a simplified interface for scheduling and receiving appointment reminders and follow-up information.   **Project Main Deliverables:**  The expected deliverables at the project's conclusion are:   * Fully functional appointment scheduling application. * Integration of the LLM model for chatbot interactions. * Implementation of machine learning analytics tools for data insights. * Speech-to-text and text-to-speech functionality for user accessibility. * Detailed technical documentation, user manuals, and final project reports. * Presentation materials for academic evaluation.   This project aims to revolutionize the medical appointment scheduling process, providing a more efficient, personalized, and automated system through cutting-edge technology integration and innovative design strategies.  **Special considerations (equipment, location, constraints, existing material…):**  The project's scope encompasses the design, development, and implementation of the appointment scheduling application integrated with the chatbot, emphasizing efficient scheduling, data collection, and personalized patient care. Constraints include adherence to open-source licensing, compatibility with specified technology stacks, and the need for comprehensive documentation and presentations for academic evaluation.  **Ownership of Intellectual Property:** All intellectual property (IP) rights resulting from the development of the Appointment Scheduler Tool for healthcare will belong exclusively The ownership agreement ensures that the c retains full rights to the software, codebase, and associated assets developed during the project.  **Student Rights:** While the IP rights belong to the client, students involved in the project will retain the opportunity to create reports and deliver presentations for educational purposes within the classroom setting. Students will have the right to showcase their contributions and learnings from the project as part of their academic endeavors.  **Licensing Considerations:** In alignment with the client’s ownership of the IP rights, there will be guidelines and restrictions on the use, modification, and distribution of the Appointment Scheduler Tool. This will include outlining permissible uses and ensuring compliance with the established IP ownership agreements.  **Industry Contact Information:**  Proposed By: Bülent Uyaniker  Company Name: DataSpeckle Scientific Inc.  Company Address: 2884 Summerview Crt. W. Kelowna BC V4T 2S5  Email Address: bulent@dataspeckle.com  Company Phone: 250-899-5503  Company Website: <https://dataspeckle.com> | L | Y |
|  | **Document Automation for Healthcare Clinics**  **Background Information:**  The healthcare industry is inundated with vast amounts of paperwork, including patient records, doctors' notes, lab results, consent forms, and various administrative documents. The efficient management and processing of these documents are crucial for ensuring timely and accurate healthcare delivery. The proposed capstone project aims to address these challenges by developing a comprehensive Document Automation Tool tailored specifically for the healthcare sector.  Healthcare institutions face significant challenges related to document management, leading to inefficiencies and potential risks. Some of the key challenges include:   * **Manual Data Entry and Processing:** The reliance on manual entry and processing of documents such as doctors' notes, lab results, and patient forms leads to errors, delays, and increased administrative workload. * **Lack of Standardization:** Documents are often stored in different formats, making it challenging to maintain uniformity and accessibility across the healthcare system. * **Security and Privacy Concerns:** Ensuring patient data confidentiality is crucial. However, the current methods of document storage and handling might pose security risks and vulnerabilities. * **Limited Accessibility and Collaboration:** Difficulties in accessing and sharing documents among healthcare providers impede collaborative efforts and decision-making processes. * **Inefficient Consent Management:** Handling patient consent forms manually without adequate verification methods like electronic signatures or QR codes leads to potential legal and security issues.   Identification of Pain Points for Stakeholders:   * **Patients:** Inconvenience in filling multiple paper-based forms repeatedly, leading to dissatisfaction and potential errors in information submission. * **Healthcare Providers:** Time-consuming manual data entry, difficulty in retrieving specific patient information promptly, and compliance challenges in managing consent forms. * **Administrative Staff:** Burdened with extensive paperwork, increasing the likelihood of errors and delays in document processing.   The proposed Document Automation Tool aims to address these challenges by implementing cutting-edge technologies, streamlining processes, ensuring data security and privacy, and providing a user-friendly interface for seamless document management within the healthcare environment. In the subsequent sections, the project will delve into requirements analysis, design strategies, and implementation methodologies to mitigate these identified challenges and create an effective solution.  **Project Main Objectives:**  The primary objective of this project is to create a sophisticated platform that streamlines document handling processes within healthcare facilities. This tool will encompass multiple functionalities, including Optical Character Recognition (OCR) technology, document conversion (PDFs and scanned files), patient intake forms, consent forms with QR codes and electronic signature verification, and the capability to conduct patient surveys and generate comprehensive reports.  The current manual handling of documents in healthcare institutions leads to inefficiencies, increased administrative burden, and potential errors in data processing. By automating these processes, the project aims to:   * Improve the accuracy and speed of document processing. * Enhance patient data security and confidentiality. * Reduce administrative workload, allowing healthcare professionals to focus more on patient care. * Facilitate seamless access to critical information for medical decision-making.   **Project Main Deliverables:**   1. Document Automation Software Application:    * The primary deliverable is the fully functional Document Automation Tool developed using the chosen technology stack (Python, FastAPI, React, PostgreSQL, etc.).    * This software encompasses functionalities such as OCR technology for document processing, patient intake forms, consent forms with QR codes and electronic signature verification, survey tools, and report generation capabilities.    * Encrypted Patient survey tool with proper weighing schema similar to psycometric surveys 2. Documentation:    * Technical documentation detailing the system architecture, design choices, and implementation strategies utilized during the development process.    * User manuals providing comprehensive instructions for healthcare professionals and administrative staff on utilizing the tool effectively. 3. Reports and Presentations:    * Reports summarizing the project's methodologies, challenges faced, solutions implemented, and outcomes achieved throughout various project phases.    * Presentations prepared for classroom learning purposes, showcasing the project's progress, milestones, and technical insights. 4. Training Materials:    * Educational training materials that aid in user training sessions, guiding individuals on navigating the Document Automation Tool, handling documents, and utilizing its features. 5. IP and Licensing Documentation:    * Documentation outlining the intellectual property ownership agreement and licensing terms agreed upon, clearly defining usage rights and restrictions. 6. Deployed System and Handover Materials:    * The deployed Document Automation Tool ready for live operation within the healthcare setting.    * Handover documentation providing guidance on system maintenance, configurations, and administrative tasks for seamless transition to the client or designated personnel.   These deliverables collectively represent the culmination of efforts put forth in designing, developing, testing, and deploying the Document Automation Tool for Healthcare. They form the comprehensive package essential for implementing and utilizing the developed solution effectively within healthcare institutions.  **Special considerations (equipment, location, constraints, existing material…):**  The project's scope encompasses the design, development, and implementation of the appointment scheduling application integrated with the chatbot, emphasizing efficient scheduling, data collection, and personalized patient care. Constraints include adherence to open-source licensing, compatibility with specified technology stacks, and the need for comprehensive documentation and presentations for academic evaluation.  **Ownership of Intellectual Property:** All intellectual property (IP) rights resulting from the development of the Document Automation Tool for healthcare will belong exclusively to the client. The ownership agreement ensures that the client retains full rights to the software, codebase, and associated assets developed during the project.  **Student Rights:** While the IP rights belong to the client, students involved in the project will retain the opportunity to create reports and deliver presentations for educational purposes within the classroom setting. Students will have the right to showcase their contributions and learnings from the project as part of their academic endeavors.  **Licensing Considerations:** In alignment the client’s ownership of the IP rights, there will be guidelines and restrictions on the use, modification, and distribution of the Appointment Scheduler Tool. This will include outlining permissible uses and ensuring compliance with the established IP ownership agreements.  **Industry Contact Information:**  Proposed By: Bülent Uyaniker  Company Name: DataSpeckle Scientific Inc.  Company Address: 2884 Summerview Crt. W. Kelowna BC V4T 2S5  Email Address: bulent@dataspeckle.com  Company Phone: 250-899-5503  Company Website: https://dataspeckle.com  Date: December 18, 2023 | L | Y |
|  | **A Business Intelligence (BI) Tool for Data Visualization**  **Introduction (see** [**https://azure.microsoft.com/en-ca/overview/what-are-business-intelligence-tools/**](https://azure.microsoft.com/en-ca/overview/what-are-business-intelligence-tools)**):** Business intelligence (BI) tools are types of application software that collects and processes large amounts of unstructured data from internal and external systems, including books, journals, documents, health records, images, files, email, video, and other business sources. While not as flexible as business analytics tools, BI tools provide a way of amassing data to find information primarily through queries. These tools also help prepare data for analysis so that you can create reports, dashboards, and data visualizations. The results give both employees and managers the power to accelerate and improve decision making, increase operational efficiency, pinpoint new revenue potentials, identify market trends, report genuine KPIs, and identify new business opportunities.  Typically used for more straightforward querying and reporting of business data, business intelligence tools can combine a broad set of data analysis applications, including ad hoc analysis and querying, enterprise reporting, online analytical processing (OLAP), mobile BI, real-time BI, operational BI, cloud and software as a service BI, open-source BI, collaborative BI, and location intelligence. It can also include data visualization software for designing charts, as well as tools for building BI dashboards and performance scorecards that display business metrics and KPIs to bring company data to life in easy-to-understand visuals.  In this project, you will develop a customizable BI tool for a Data Warehouse to visualize information for algorithmic trading systems.  **Deliverables:** (1) Source Code; (2) Working Application(s); (3) Design documentation; (4) A technical report in the form of a research paper submitted to https://arxiv.org (Latex).  **Client:**  Albert Wong [alwong@langara.ca](mailto:alwong@langara.ca)  Gaetan Hains [gaetan.hains@proton.me](mailto:gaetan.hains@proton.me) | H | L |
|  | **ACNO – Client Usage of a Website**  The ACNO has been tasked with acting as a leader in the advancement of Reconciliation, Equity, Diversity, Inclusivity, and Access (REDIA) to our 33 member groups and the community. We would like to add a resource page to our website that would allow members and the public to access information, videos and resources as well as upload information to our website allowing us to assess where they are in their REDIA journey and provide feedback.  Currently, we use Wordpress and would need additional pages and links added to our website for functionality with the REDIA resource page.  Users will share information about where they currently are in their REDIA journey and let us know what resources are needed. We would also like to have a form where community partners can share their REDIA resources with us for inclusion on our website REDIA page. We would also like to have a feedback feature where we can gauge how we are doing.  We want to be able to extract from our website a report generated for:   * Number of and type of visitor * Average time on page, * Page views * Average session duration * Social referrals * New and returning visitor sessions * Top pages/resource   **Client:**  Shawna Patenaude  [shawna@ACNO.ca](mailto:shawna@ACNO.ca) or [ed@acno.ca](mailto:ed@acno.ca)  250-351-7410 | L | Y |
|  | **Vernon Immigrant Services App**  Add a feature to our Wix app that allows students of LINC classes to communicate with their teachers when they are going to be absent from class, and their teacher and LINC coordinator will receive email notifications. The number of absences for each student is recorded and can be viewed by LINC staff, and once the number of absences for a student reaches a certain number, the LINC coordinator is notified via email and that student is somehow marked in the system  (e.g. highlighted red).  Students will need the ability to submit their absences through their account in the app. The teacher must be able to group active students into classes, and also must be able to move students out of a class and into “inactive” status.  Users will need to be able to enter into forms on the website/application:   * Which day(s) they will be absent * the reason for the absence (drop down menu) * additional comments (optional)   We want to be able to extract from our website/application a report generated for:   * Number of absences for each student * reason for each absence * additional comments. * Ability to view data such as the most common reasons for absence (sick, busy, other) as a graph * Which months have the highest number of absences as a graph * which classes have the highest number of absences as a graph.   **Client**  Jacqueline Pereira  [jacqueline.pereira@vdicss.org](mailto:jacqueline.pereira@vdicss.org)  250-542-4177 | L | Y |
|  | **Vernon District Riding Club App/Website**  Create an online platform and/or app that volunteers can record their hours and the Volunteer Committee can reference.  Currently we do not have a volunteer portal on our website or an app  Users will need to be able to enter into forms on the website/application:   * Volunteer’s First and Last Name * Are they part of a Family Membership * Date of Volunteering * Number of hours completed * Brief Description of the work done * VDRC Board Member reference * Area for Notes * \*note that we would need volunteers to be able to enter more than one date and also go back to the portal/app multiple times over the course of the season and add additional hours as they are completed.   We want to be able to extract from our website/application a report generated for:  VDRC Members must volunteer for 6 hours per year. If they do not, we charge them a volunteer fee. We would need to be able to run a report to indicate how many hours each volunteer completed. This would mean aggregating the hours each individual completed that may have been entered several times over the course of the season.  Vernon District Riding Club (VDRC)is a registered non-profit that has been operating in the Vernon area since 1955. Our mandate is to provide a safe, accessible and affordable place for equestrians of all skill levels and disciplines to ride, teach, learn and compete. We are open to the public and host community events as well. We have a website built using WordPress. You can visit us at vernonridingclub.com  **Client**  Sherry Demetrick, Secretary, Board of Directors  [cdemetrick@telus.net](mailto:cdemetrick@telus.net)  250-558-7283 | L | Y |
|  | **Lakepoint Capital Portal System**  Lakepoint Capital assists clients in arranging commercial financing which requires the exchange of sensitive information. We are seeking a “portal” type system (akin to Dropbox) that would:  1) allow clients (and ourselves) to see what documentation has been uploaded by the clients to the portal, as well as  2) allow us to use some basic conditional logic such that we could create a list of what is required  and if client uploads X then that item is checked off and they are unable to upload anything further as far as that requested item is concerned  The information that would change would be the files uploaded, downloaded, and deleted from the database.  Users will need to be able to enter into forms on the website/application:   * Uploading tax returns * financial statements * personal identification * personal net worth statements, * corporate documents * appraisals * other types of third-party reports. * The file formats would typically be .pdf, .doc, and .xls or some variations of same   We want to be able to extract from our website/application a report generated for:   * When documents have been uploaded   **Client**  Brian Stephenson (Lakepoint Capital)  [brian@lakepointcapital.ca](mailto:brian@lakepointcapital.ca)  250-859-4394 | L | Y |
|  | **Okanagan College – Tracking of Research Projects**  Create a tracking and reporting system for current and past research projects at Okanagan College. This website will need to create an interface where, once a project has been initiated, regular updates and tracking can be done by both administrators and researchers. This will be a critical communication and tracking tool for the Applied Research area and will streamline the multiple tracking tools currently being used.  This is a brand new application. Currently we are not able to access this information in a centralized, online form that all parties can access.  Users will need to be able to enter into forms on the website/application:   * Research project details such as application dates, dates grants are received, when reporting is due and status updates. * Additionally, some financial reporting (i.e. a status of the budget) will also be updated.   We want to be able to extract from our website/application a report generated for:   * Ideally being able to see current projects, descriptions and values all in one place * ID projects that are experiencing some challenges (self-reported) * Extract funders, dollars by funder, dollars by category of research (research focus area), and other related data.   **Client**  Kerry Rempel, Associate Dean, Okanagan School of Business  [krempel@okanagan.bc.ca](mailto:krempel@okanagan.bc.ca)  250-762-5445, xt. 4778 | L | Y |
|  | **Turning Points Collaborative Society Donor and Grant Management System**  Development of a comprehensive donor and grant management system to automate data integration from platforms like CanadaHelps, ShareVision, and Microsoft 365 Forms. This system aims to enhance the efficiency of tracking, reporting, and analyzing donations, grants, and their impacts, streamlining operations for Turning Points Collaborative Society, while acting as an internal CRM tool.   * Continuous updates and management of data synchronization settings with CanadaHelps, ShareVision, and other platforms for accurate and timely data integration. * Capability for bulk data file uploads with customizable matching fields, enhancing seamless data integration when automated feeds are insufficient. * Flexibility in configuring and customizing reports and analysis tools to fit various project needs and timelines. * Real-time adjustments in financial contributions, allocations, and expenditures as new data is received. * Dynamic tracking and updating of impact measurements linked to specific donations and grants.   Users will need to be able to enter into forms on the website/application:   * Manual input of new donor details or grant information not captured by automated data feeds. * Updates or modifications to existing donor profiles or grant details. * Specific notes or conditions related to donations or grants essential for accurate reporting and impact assessment.   We want to be able to extract from our website/application a report generated for:   * Detailed financial reports on donor contributions and grant disbursements, customizable for different projects and time frames. * Impact analysis reports showing the effectiveness and outcomes of projects funded by donations and grants. * Administrative efficiency metrics and trend analysis to evaluate process improvements, resource optimization, and to identify areas for future development.   **Client**  Kody Woodmass, Fund Development Coordinator  [kody.woodmass@turningpoints.ngo](mailto:kody.woodmass@turningpoints.ngo)  250-808-0113 | H | Y |
|  | **Customer Relationship Management (CRM) Database**  My name is Nicole Hoodicoff, and I serve as the Family Support Services Manager at Childhood Connections, a non-profit organization dedicated to supporting families and caregivers in the Central Okanagan.  Our primary source of funding is derived from various grants, and as we continually strive to enhance our services, we are exploring opportunities to streamline our data management processes. Currently, much of our information is tracked through Excel spreadsheets, and we believe a dedicated CRM database could significantly improve our efficiency.  Considering your project involving students, we are keen to explore the possibility of collaborating with your team. Specifically, we are seeking a CRM database tailored to our needs, allowing us to monitor client engagement across diverse programs and surveys.  The ability to extract pertinent information for grant reporting purposes is crucial for us, and our aim is to transition from manual data entry on spreadsheets to a more sophisticated system.  **Client**  Nicole Hoodicoff, Family Support Services Manager, Childhood Connections  250-762-3536, xt 2 | L | Y |
|  | **Rehabilitation Program Mobile Application**  Our team has recently launched a web based online pulmonary rehabilitation program. However, we are wanting to convert the program into a mobile application that can be downloaded from the app store. The program provides personalized, evidence based rehabilitation resources (e.g., exercise training, breathing techniques, and education/self management training) to patients living with a chronic respiratory condition. The program analyses the patient progress and updates resources accordingly. Although we have launched our MVP there are many features we would like to add to the mobile app as well.  **Client**  Amanda Holyk, iMaster Health Inc, CEO/Founder  [amanda.holyk@imasterhealth.com](mailto:amanda.holyk@imasterhealth.com)  780-603-3652 | L | Y |
|  | **IBA Group – Robotic Process Automation to Intelligent Process Automation: Classification**  **(Project #1)**  **Background**:  Robotic Process Automation (RPA) is a technology that uses software robots or "bots" to automate repetitive and rule-based tasks within business processes.  Intelligent Process Automation (IPA) is an advanced form of automation that combines Robotic Process Automation (RPA) with artificial intelligence (AI) technologies. While RPA focuses on automating rule-based, repetitive tasks, IPA goes a step further by incorporating elements of machine learning, natural language processing, and other AI capabilities to handle more complex and cognitive tasks.  **Project Description:**  Design and implement an Intelligent Process Automation (IPA) solution to enhance the efficiency of email management (classification).  The system will leverage Machine Learning (ML) algorithms to classify email topics, prioritize messages based on urgency, and intelligently route them to the appropriate department or employee for swift resolution.  **Project Tasks:**  Email Topic Classification using ML:   * Leverage ML algorithms to analyze the content of incoming emails and classify them into predefined topics such as "loan request," "invoice question," or "complaint."   Message Prioritization:   * Develop a prioritization algorithm that assesses the urgency of each email based on predefined criteria or ML algorithms.   Intelligent Routing System:   * Implement department algorithms to determine the appropriate department or employee responsible for handling each classified topic.   Provide a user-friendly interface for monitoring the classified topics, prioritization scores, and routing decisions.  **Client**  Sergii Baibara, CEO of IBA Ukraine  [s.baibara@ibagroup.eu](mailto:s.baibara@ibagroup.eu)  Mikhail Trubatch, Head of RPA & Backend Development Subdivision, IBA Group  [MTrubatch@ibagroup.eu](mailto:MTrubatch@ibagroup.eu) | H | N |
|  | **IBA Group – Robotic Process Automation to Intelligent Process Automation: Information Extraction (Project #2)**  **Background**:  Robotic Process Automation (RPA) is a technology that uses software robots or "bots" to automate repetitive and rule-based tasks within business processes.  Intelligent Process Automation (IPA) is an advanced form of automation that combines Robotic Process Automation (RPA) with artificial intelligence (AI) technologies. While RPA focuses on automating rule-based, repetitive tasks, IPA goes a step further by incorporating elements of machine learning, natural language processing, and other AI capabilities to handle more complex and cognitive tasks.  **Project Description:**  This project involves the development of an Intelligent Process Automation (IPA) system that could be tailored for specific institutions. The system will leverage advanced algorithms to automate and extract financial metrics from reports and monitor transactions efficiently, analyze medical documents for various purposes. The system will aim to improve accuracy, reduce manual effort, and ensure compliance with regulatory standards.  **Project Tasks:**  Financial Report Data Extraction:   * Develop ML algorithms capable of extracting key financial metrics (e.g., income, expenses, profit, and loss) from financial statements provided in PDF format.   Transaction Monitoring:   * Implement algorithms to analyze textual descriptions of transactions in statements and automatically extract crucial details like amount, date, and transaction description. * Implement algorithms to analyze medical documents for various purposes.   Provide a user-friendly interface that allows users to monitor the results of automated processes, review extracted information, and intervene if necessary.  **Client**  Sergii Baibara, CEO of IBA Ukraine  [s.baibara@ibagroup.eu](mailto:s.baibara@ibagroup.eu)  Mikhail Trubatch, Head of RPA & Backend Development Subdivision, IBA Group  [MTrubatch@ibagroup.eu](mailto:MTrubatch@ibagroup.eu) | H | N |
|  | **Hergott Law: Secure Document Vault – Collaboration with BUAD 438 \***  **Description:**  Create an electronic vault with a series of drawers:  **1. Testamentary wishes drawer**   * One drawer contains the user’s testamentary wishes, * A digital form would be filled out to capture those wishes, i.e. names of beneficiaries, name of executor, a list of any particular items they want going to anyone in particular and how the balance of the estate is divided - very basic wishes. * The user could choose to trigger printed copy of those wishes in the form of a will, which would require some basic programming. * Alternatively, the user could keep their wishes entirely digital. The law in British Columbia allows for an unsigned, digital expression of testamentary wishes to be given full effect as the person’s will. * Any time the user’s wishes are updated in this drawer, there would need to be confirmation by the user that the contents of the drawer are their fixed and final (at that time) testamentary intentions – which is the evidence needed for the court to give such a will legal effect. * The user would alert their intended executor that their intentions are contained within the vault with instructions that providing a death certificate to Hergott Law would give access to that drawer.   **2. Asset inventory drawer**   * Another drawer would be an inventory of the user’s assets, whether they be real property, bank accounts, investments, crypto coins or whatever. * The Executor would get access to this drawer as well on production of a death certificate. * The information in this drawer would be updated by the user as assets are acquired or divested.   **3. Messages drawer (Beyond the Grave)**   * This drawer would contain messages that the user would want delivered to intended recipients on their death, i.e. to family members, friends or whoever. * Each entry would require the intended recipient’s name, address and e-mail address. * On Hergott Law being presented with the Death Certificate these messages would be delivered directly to the intended recipients.   **4. Funeral wishes drawer**   * Funeral wishes do not properly form part of a person’s will. * I envision fields the user would fill out for various funeral aspects like guests they’d want invited, those they would want excluded, cremation/bio disposal, special songs, whatever…   **5. Pet wishes drawer**   * There would be fields for the user to enter information about the care of their pet including its brand/type of food, exercise patterns, commands the pet responds to, preferred person to take over the pet’s care.   **CONFIDENTIALITY**   * The vault would have to be impenetrable by anyone other than the user. * Though Hergott Law would have to be able to access it to follow through with providing the contents of all drawers except the messages drawer to the executor on the executor producing a death certificate. * And to ensure the messages get to the intended recipients   Business students in BUAD 438 are working with Hergott Law and the group that picks this project will work alongside them as well.  **Client**  Paul Hergott, Lawyer, Hergott Law  778-860-0817  Blair Baldwin, Professor, School of Business, Okanagan College  250-859-4566  [bbaldwin@okanagan.bc.ca](mailto:bbaldwin@okanagan.bc.ca) | L | Y |
|  | **Electronic Medical Records & Angular Higher Order JS with a database \***  **Note: this project does not have a full description yet, so I am including brief details of what the client has requested. The client has not reached back out yet with more details.**  **Description:**   * Existing Electronic Medical Record (EMR) application that needs a few features implemented using Angular, .NET Core, SQL Server * Generate patient chart summaries using Azure OpenAI Services. We collect patient chart data every time a patient visits the clinic. We would like a summary of the services performed and notes of every patient on their chart.All input fields will require user’s to input chart entries   **Tech Stack:**   * Angular * .NET * Azure * SQL   **Client**  Maizal Munif  [maizal@gmail.com](mailto:maizal@gmail.com)  [Maizal@emilyemr.com](mailto:Maizal@emilyemr.com)  250-862-1217 | L | Y |