**Project Scope – Student Part – monthly payment**

The project encompasses the following key features and functionalities:

1. **Invoice Generation from Excel**: Extract invoice details from Excel sheets provided, generate invoices in PDF and Word formats automatically. This will be multiple times in a month. Like continuous task.
2. **Email Notifications**: Email PDF versions of invoices to respective teachers with a good email and pdf format. All invoices for a parent's children and for multiple subjects to be clubbed into a single email. Email format (HTML version) should be such that it can be changed from time to time, so that promotion can be done. Email should go from a particular email of winquestonline.com in gmail so that response can be received in same mail.
3. **Invoice Storage and Management**:
   * Accumulate copies of all invoices in one PDF for accounting purposes. (with options to do it multiple time, along with amendment and month end options)
   * Individual and combined copies of invoices should be downloadable.
   * Maintain a list of all invoices with filtering, sorting, search and downloading options.
   * Maintain a front page list of all invoices (navigation page) with all options, segregated monthwise and yearwise and with filtering, sorting, check box and search options. All actions can be done from that front screen. Icons for the same shall be provided there. Examples attached (like of Stripe)
   * List total, monthwise total, yearwise total, periodwise total or selected portions (like customerwise or any particular subjectwise) total options should be there.
   * Overall this whole things can also be downloadable in excel, even monthwise total, yearwise total, periodwise total or selected portions (like customerwise or any particular subjectwise) options to download in excel should be provided
   * Tick box selection with individual selection and “select all” after filtering/sorting/searching option should be provided.
   * hiding of relevant column should be provided so that work can be done (like Excel)
4. **Invoice Editing and Re-generation**:
   * Option to manually edit invoice details and regenerate invoices. Also option to trigger mail for that emended invoice individually should be provided.
   * Maintain a version history and audit trail for edited and deleted entries.
5. **Sales Returns and Amendments**:
   * Provide options for part or full sales returns. This data should form a separate list with all features like the main list.
   * Allow amendments and cancellations of invoices. With option to email to Parent
6. **Currency Conversion**:
   * Support multiple currencies for invoicing.
   * Implement RBI exchange rate linkages for currency conversion.
7. **Payment Integration**:
   * Link with various payment methods on the website. Payment link to go to .parents email. One page for payment for all payment gateways.
   * Allow parents to make part or full payments against invoices. Invoices should be populated based on parent name, email id and then parent can choose which payment they have to make
   * Handle balance adjustments and outstanding payments.
   * Option to mention payment amount against each invoice, payment method, charges, net amount received and INR equivalent should be mentioned and option to upload in the system against each invoice no. of part or full payment should be there. It can be uploaded or can be manually put in also for few invoices
8. **Reminders and Notifications**:
   * Send automatic reminders for pending invoices via email and WhatsApp. There should be a trigger mechanism, confirmation click
   * Include payment details and links to invoices in reminder notifications.
   * After the payment details is put in, there should be an option to send reminders for pending invoices. Reminder mail to be separate and in different language and the same invoice can be attached. If there is any part payment pending, then part payment amount against a particular invoice should be mentioned in the mail body. pending invoices reminder can be sent individually or together by selecting. Selection button should be there again each invoices. Selection button should be linked to filtering. this should work monthwise, yearwise and periodwise also.
9. **Search and Filter and sorting with selection (check box)**:
   * Enable search based on all coloums like parent name, student name, phone number, and email ID, subjectwise, Teacher name, gst type, payment method etc
   * Provide filtering options for all coloums like parent name, student name, phone number, and email ID, subjectwise, Teacher name, gst type, payment method invoice status, payment status, etc.
   * Enable sorting based on all coloums like parent name, student name, phone number, and email ID, subjectwise, Teacher name, gst type, payment method etc
   * Should have the option of pulling data and looking at the invoicing and payment of particular parent over 3-4 years time period
   * Should have the option of pulling data and looking at the invoicing and payment of particular teacher/subject/time zone and analysing monthwise for 3-4 years time period
10. **Security and Authorization**:
    * Implement authorization levels for viewing and editing invoices.
    * Ensure sensitive data such as phone numbers, email addresses, and addresses are hidden.

**Technologies Used**

The Student Invoice project utilizes the following technologies:

* **Programming Languages**: PHP, JavaScript, Laravel 10 ,JQuery
* **Database Management System**: MySQL, PSQL
* **Web Development**: HTML, CSS, Bootstrap
* **Excel Processing**: PHPExcel Library (for processing Excel files)
* **PDF Generation**: TCPDF Library (for generating PDF invoices)
* **Word Document Generation**: PHPWord Library (for generating Word invoices)
* **Email Handling**: PHPMailer Library (for sending emails)
* **Payment Integration**: Integration with various payment gateways (e.g., Phonepay, Stripe) – mostly we will do Stripe and CC Avenue
* **Document storage system? Where it will be deployed?**

**Project Workflow**

1. **Excel Sheet Upload**: Users upload Excel sheets containing invoice details.
2. **Invoice Generation**: The system processes uploaded Excel sheets to generate invoices.
3. **Email Notifications**: Invoices are emailed to respective teachers.
4. **Invoice Management**: Invoices are stored, managed, and made available for download.
5. **Payment Integration**: Teachers make payments against invoices using integrated payment methods.
6. **Reminder Notifications**: Automatic reminders are sent for pending invoices.
7. **Authorization and Security**: Access to sensitive data and functionalities is controlled based on user roles.

## Conclusion

The Student Invoice project streamlines the invoicing process for educational institutions, providing automation, convenience, and security in managing student invoices. By integrating with various tools and technologies, it offers a comprehensive solution for invoicing, payment processing, and communication with teachers.

**Project Scope – Teacher Part – Fortnight payment**

The project encompasses the following key features and functionalities:

1. **Receipt Generation from Excel**: Extract payment details from Excel sheets provided, generate Receipts in PDF and Word formats automatically. This will be multiple times in every fortnight. Like continuous task. TDS to be deducted @ specified rate in each receipt.
2. **Summary PDF**: All Receipts of a teacher to be clubbed and one summary PDF to be generated(as per format) and one mail should go every fortnight. Summary PDF should also be downloadable in excel for working purpose.
3. **Email Notifications**: Email PDF versions of Receipts to respective teachers along with summary pdf with a good email and pdf format. All Receipts for a teacher and for multiple students/subjects to be clubbed into a single email. Email format (HTML version) should be such that it can be changed from time to time, so that various intimation can be done. Email should go from a particular email of winquestonline.com in gmail so that response can be received in same mail. Tracking of email delivery status and handling bounced emails.
4. **Receipts Storage and Management**:
   * Accumulate copies of all Receipts in one PDF for accounting purposes. (with options to do it multiple time, along with amendment and month end options)
   * Individual and combined copies of Receipts should be downloadable.
   * Maintain a list of all Receipts with filtering, sorting, search and downloading options.
   * Maintain a front page list of all Receipts (navigation page) with all options, segregated monthwise and yearwise and with filtering, sorting, check box and search options. All actions can be done from that front screen. Icons for the same shall be provided there. Examples attached (like of Stripe)
5. List total, fortnighwise, monthwise total, yearwise total, periodwise total or selected portions (like customerwise or any particular subjectwise) total options should be there.
   * Overall this whole things can also be downloadable in excel, even fortnightwise, monthwise total, yearwise total, periodwise total or selected portions (like customerwise or any particular subjectwise) options to download in excel should be provided
   * Tick box selection with individual selection and “select all” after filtering/sorting/searching option should be provided.
   * hiding of relevant column should be provided so that work can be done (like Excel)
   * After the actual bank payment details is put in, there should be an option to send pending Receipts which were not sent earlier. Selection button should be there again each Receipts. pending receipts mail can be sent and also provision of updating the summary pdf should be there with any amendment in the receipts.
6. **Receipt Editing and Re-generation**:
   * Option to manually edit receipt details and regenerate Receipts. Also option to trigger mail for that emended receipt individually should be provided.
   * Maintain a version history and audit trail for edited and deleted entries.
7. **Payment Returns and Amendments**:
   * Provide options for part or full sales returns. This data should form a separate list with all features like the main list.
   * Allow amendments and cancellations of Receipts. With option to email to Teacher
8. **Currency Conversion**:
   * Support multiple currencies for invoicing. But 99% it will be in INR.
   * Implement RBI exchange rate linkages for currency conversion.
9. **Payment Integration**:
10. A summary of all teacherwise payment should be generates in a page with the option to download in the excel and pdf for bank payment instruction and for reconciliation. The total amount of payment should be shown in the mail to bank or letter to bank format and printout of the same can be done. There should be various colums for details like teacher name, phone no. address, bank account details like account no., ifsc code, name in bank account and others for preparing summary page for bank payment.
    * Once payment is done, there should be system of uploading in excel all payments processed by bank, based on that system should check and accumulate payment against each receipt and date of payment. Sum of that also be shown below so that checking can be done. Total payment and tds should be shown.
    * TDS return data should be generated based on above payment data.
11. **Reminders and Notifications**:
    * After the payment details is put in, there should be an option to send remaining/individual pending Receipts. Pending Receipts reminder can be sent individually or together by selecting. Selection button should be there again each Receipts. Selection button should be linked to filtering. this should work monthwise, yearwise and periodwise also.
12. **Search and Filter and sorting with selection (check box)**:
    * Enable search based on all coloums like parent name, student name, phone number, and email ID, subjectwise, Teacher name, gst type, payment method etc
    * Provide filtering options for all coloums like parent name, student name, phone number, and email ID, subjectwise, Teacher name, gst type, payment method receipt status, payment status, etc.
    * Enable sorting based on all coloums like parent name, student name, phone number, and email ID, subjectwise, Teacher name, gst type, payment method etc
    * Should have the option of pulling data and looking at the invoicing and payment of particular parent over 3-4 years time period
    * Should have the option of pulling data and looking at the invoicing and payment of particular teacher/subject/time zone and analysing monthwise for 3-4 years time period
13. **Security and Authorization**:
    * Implement authorization levels for viewing and editing Receipts.
    * Ensure sensitive data such as phone numbers, email addresses, and addresses, bank details are hidden.

**Technologies Used**

1. **Frontend:** HTML5, CSS3, JavaScript, Bootstrap
2. **Backend:** PHP (Laravel Framework)
3. **Database:** MySQL
4. **PDF Generation:** TCPDF or similar library
5. **Email:** Laravel Mail

**Development Approach**

1. **Database Design:** Design and implement the database schema according to the requirements.
2. **Backend Development:** Develop backend logic using Laravel framework to handle file uploads, receipt generation, payment processing, etc.
3. **Frontend Development:** Create user-friendly interfaces for uploading files, managing receipts, and viewing payment history using HTML, CSS, and JavaScript.
4. **Integration:** Integrate PDF generation libraries, email sending functionality, and bank payment systems.
5. **Testing:** Conduct thorough testing of the website to ensure all features are working correctly and efficiently.
6. **Deployment:** Deploy the website on a web server and ensure proper configuration for security and performance.

**Documentation Structure**

1. **Introduction:** Overview of the project and its goals.
2. **Requirements:** Detailed list of functional and non-functional requirements.
3. **Technologies Used:** Overview of the technologies and tools used in development.
4. **Development Approach:** Step-by-step guide on how the website will be developed.
5. **Database Design:** Description of the database schema and relationships.
6. **Backend Development:** Explanation of backend logic and implementation details.
7. **Frontend Development:** Overview of frontend interfaces and user interactions.
8. **Integration:** Details on integrating third-party libraries and systems.
9. **Testing:** Strategy for testing the website and ensuring quality.
10. **Deployment:** Guidelines for deploying the website on a production server.

**Conclusion**

The Teacher Payment System website aims to automate and streamline the payment process for teachers, enhancing efficiency and reducing manual effort. By following this documentation, the development team can successfully build and deploy the website to meet the specified requirements.