# Sullimar Academy of Music

## Software Engineering Web Project – Enigma Crackers

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# INTRODUCTION

## PURPOSE OF SYSTEM

The purpose of this web application is to transform an existing business and its operation to a computerized system. The main objective is to change the existing daily operations of the organization to do multiple tasks that were previously done physically to being done remotely i.e. online.

The Sullimar Academy of Music. Marketing as "Sullimar academy of Music" has been in business for the last 40 years and functions from a bricks and mortar organization located in Dublin Road, Limerick. The Senior Management have made a dedication in order to create an online presence/website for the Sullimar Academy of Music. The main aim of this project is to significantly convert the manual functions of the Sullimar Academy of Music to all virtual and online based functions as well as to provide Information about various courses, events, and buying books. This will be achieved by designing an online website which will cater to a wider range of audiences looking for different courses in music and different events compared to the current bricks and mortar school/college, thus increasing the businesses overall revenue, and also covering a greater geographical location as the organization will have an online presence.

The reason for setting of the Sullimar Academy of Music online is due to the fact that the senior management team wants to completely convert the manual functions of the current systems which are currently physical and paper based systems to being all online based system as it is much easier to operate and function than a manual based system. The systems that the senior management team have decided to bring online are booking events, registering for courses, booking exams, application forms, and ordering books. The website will not just enable people to access various system functions but will also provide various information on different courses, and modules within the course as well as prices for events and courses etc.

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## SCOPE OF SYSTEM

At present, Sullimar Academy of Music (SAOM) operates on a Brick-And-Mortar type presence.

Paper-based documentation in the form of payment receipts, records and application forms are some of the current methodologies SAOM use to conduct their business operations. It has been noted by management that in order to continue increasing their market share at peak efficiency, they must begin to move their business online and away from a primarily paper-based, brick-and-mortar business model. It has also been noted that their accountancy department and administration department are finding it difficult to keep track of new bookings, payments and existing bookings as the overall volume of paperwork increases per annum.
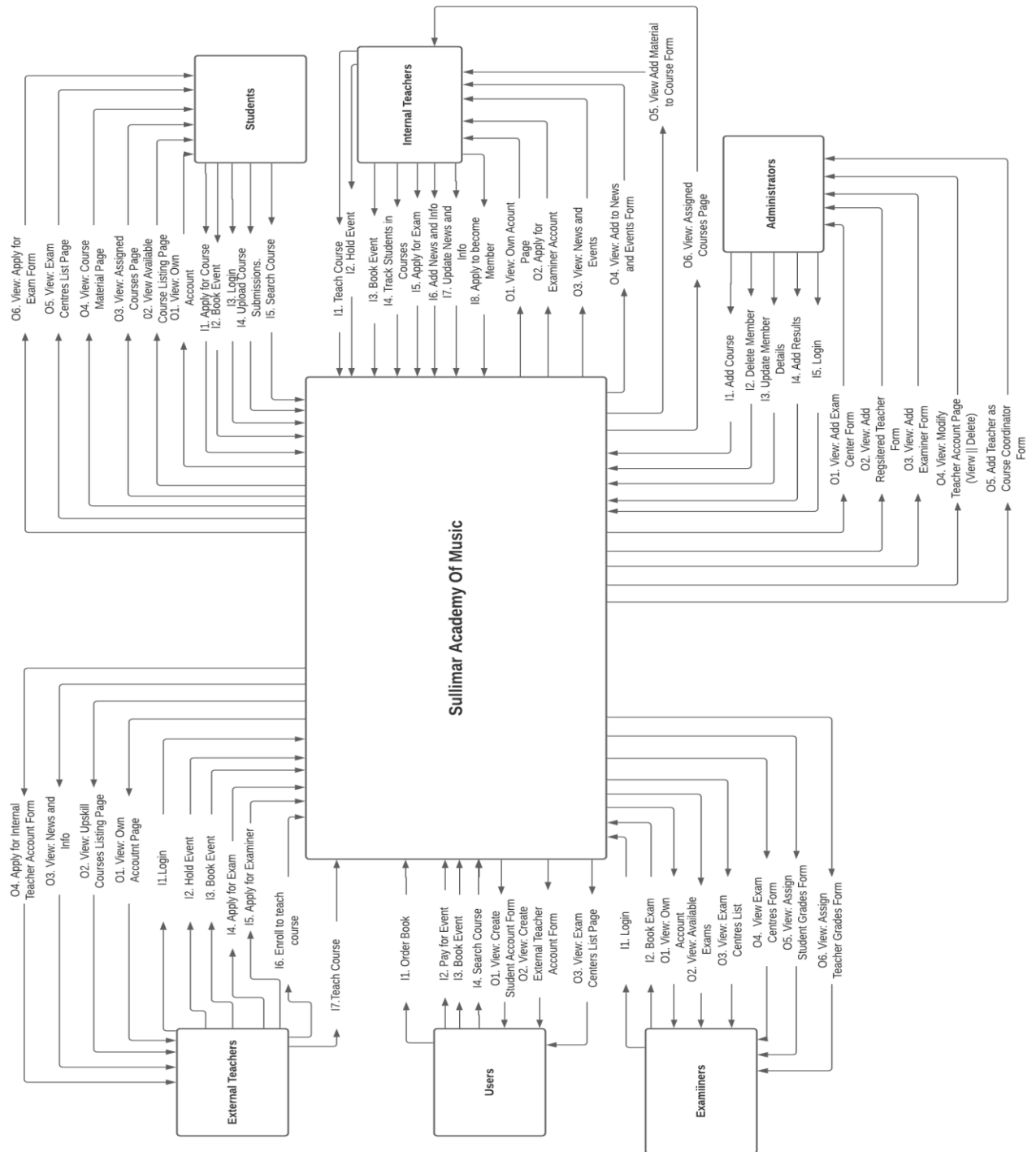
As market share for Sullimar Academy of Music continues to grow, the need to move a large portion of their business operations online and through digital mediums has become more and more apparent.

Some of the key problem areas that have been noted by SAOMs key representatives are:

- ➢ Difficulty in keeping track of bookings – due to changes & cancellations inhouse and from clients.
- ➢ Inefficient booking process with direct correlation to volume of bookings occurring over the phone.
- ➢ Keeping track of installment-based payment schemes.
- ➢ Application Forms delay due to current method of receiving through Post.
- ➢ Cheques/Payments getting lost.
- ➢ Invoices are not being fulfilled when Statements are issued due to PO's being misplaced.
- ➢ Locating examiners to oversee exams hosted in designated exam centers becoming inefficient and time consuming.

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# CURRENT SYSTEMS DESCRIPTION

## CONTEXT DIAGRAM

**Sullimar Academy Of Music**

**Students**
- O6. View: Apply for Exam Form
- O5. View: Exam Centres List Page
- O4. View: Course Material Page
- O3. View: Assigned Courses Page
- O2. View Available Course Listing Page
- O1. View: Own Account
- I1. Apply for Course
- I2. Book Event
- I3. Login
- I4. Upload Course Submissions.
- I5. Search Course

**Internal Teachers**
- I1. Teach Course
- I2. Hold Event
- I3. Book Event
- I4. Track Students in Courses
- I5. Apply for Exam
- I6. Add News and Info
- I7. Update News and Info
- I8. Apply to become Member
- O1. View: Own Account Page
- O2. Apply for Examiner Account
- O3. View: News and Events
- O4. View: Add to News and Events Form
- O5. View Add Material to Course Form
- O6. View: Assigned Courses Page

**Administrators**
- I1. Add Course
- I2. Delete Member
- I3. Update Member Details
- I4. Add Results
- I5. Login
- O1. View: Add Exam Center Form
- O2. View: Add Regsitered Teacher Form
- O3. View: Add Examiner Form
- O4. View: Modify Teacher Account Page (View || Delete)
- O5. Add Teacher as Course Coordinator Form

**External Teachers**
- O4. Apply for Internal Teacher Account Form
- O3. View: News and Info
- O2. View: Upskill Courses Listing Page
- O1. View: Own Account Page
- I1.Login
- I2. Hold Event
- I3. Book Event
- I4. Apply for Exam
- I5. Apply for Examiner
- I6. Enroll to teach course
- I7.Teach Course

**Users**
- I1. Order Book
- I2. Pay for Event
- I3. Book Event
- I4. Search Course
- O1. View: Create Student Account Form
- O2. View: Create External Teacher Account Form
- O3. View: Exam Centers List Page

**Examiiners**
- I1. Login
- I2. Book Exam
- O1. View: Own Account
- O2. View: Available Exams
- O3. View: Exam Centres List
- O4. View Exam Centres Form
- O5. View: Assign Student Grades Form
- O6. View: Assign Teacher Grades Form

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## EXTERNAL ENTIY LIST WITH DESCRIPTION

- **Teacher from SOAM**
  - The teachers from the Sullimar Academy of Music can do many functions such as having a staff portal where they can view courses, teach a course, hold and book events, track students in their courses, view timetables, view different exam centers, apply for exams, add, view and update news and info, apply to become an examiner.

- **Teachers from All -Around Ireland**
  - Teacher from all around Ireland will have a sub staff portal where they can apply to teach a course, hold and book events, apply for exams, apply to become an examiner, teach courses, view different exam centers, view timetables.

- **Students**
  - Students can apply to enroll in a course, can book and view different events, can login to the student's portal to access different information regarding different courses, events and tuitions.

- **Users**
  - The users can view and order books and events. Can view information and prices of different courses offered by the Sullimar Academy of Music.

- **Admins/ Senior Management**
  - The admin can create different courses, can delete members (students/teachers) from courses, put students results online and view all members (students, teachers etc.) by course/all.

- **Examiners**
  - Examiners will have a examiners portal where they can view different exam centers, can book availability for exam supervision, and also view the exam dates and times they have been slotted in for.

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## OUTPUTS (WITH RECIEPIENTS)

| Recipient | Title | Description | Type |
|---|---|---|---|
| External Teachers | 1. View: Own Account Page<br>2. View: Upskill Courses Listing Page<br>3. View: News & Events Page<br>4. View: Apply for Internal Teacher Account Form | 1. Can view the account details<br>2. Can see a list of courses to upskill<br>3. Can view news and events<br>4. Can apply to be an internal teacher | External |
| Internal Teachers | 1. View: Own Account Page<br>2. View: Apply for Examiner Account Form<br>3. View: News & Events Page<br>4. View: Add to News & Events Form<br>5. View: Add Material to Course Form<br>6. View: Assigned Courses Page | 1. Can view the account details<br>2. Can apply for examiner account<br>3. Can view different news and events<br>4. Can edit and add to news and events sections<br>5. Can add various materials to the courses form<br>6. Can view Assigned courses page | Internal |
| Non-Registered General Users | 1. View: Create Student Account Form<br>2. View: Create External Teacher Account Form<br>3. View: Exam Centers List Page | 1. Can create student account form<br>2. Can create external teacher account form<br>3. View different exam centers lists | External |
| Registered Students | 1. View: Own Account Page<br>2. View: Available Course Listing Page<br>3. View: Assigned Courses Page<br>4. View: Course Material Page<br>5. View: Exam Centers List Page<br>6. View: Apply for Exam Form | 1. Can view the account details<br>2. Can view available courses listings<br>3. Can see their Assigned courses page<br>4. Can see their course material page<br>5. Can view different exam centers lists<br>6. Can apply for an exam | Internal |

| Examiners | 1. View: Own Account Page<br>2. View: Available Exams List<br>3. View: Exam Centers List<br>4. View: Exam Creation Form<br>5. View: Assign Student Grades Form<br>6. View: Assign Teacher Grades Form | 1. Can view the account page<br>2. Can view available exams list<br>3. Can view different exam centers list<br>4. Can create an exam creation form<br>5. Can assign different students grades form<br>6. Can assign teacher grades form<br>7. | Internal |
|---|---|---|---|
| Administration | 1. View: Add Exam Center Form<br>2. View: Add Registered Teacher Form<br>3. View: Add Examiner Form<br>4. View: Modify Teacher Account Page (View \|\| Delete)<br>5. View: Add Teacher as Course Coordinator Form | 1. Can add an exam center form<br>2. Can add registered teacher form<br>3. Can add examiner form<br>4. Can modify (either view or delete) teacher account pages<br>5. Can add teacher as course coordinator | Internal |

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## INPUTS (WITH SOURCES)

| Recipient | Title | Description | Type |
|---|---|---|---|
| External Teachers | 1. Login.<br>2. Hold Event.<br>3. Book Event.<br>4. Apply for Exam.<br>5. Apply for Examiner.<br>6. Enroll to teach course.<br>7. Teach Course.<br>8. Apply for Internal Teacher. | 1. External Teachers can login to a sub staff portal.<br>2. When logged in External Teachers can hold an event.<br>3. When logged in External Teachers can book an event.<br>4. When logged in External Teachers can apply for an exam.<br>5. When logged in External Teachers can apply to be an examiner.<br>6. When logged in External Teachers can apply to teach a course.<br>7. When logged in External Teachers can teach a course.<br>8. When logged in External Teachers can apply to become an internal teacher. | External |
| Internal Teachers | 1. Teach Course.<br>2. Hold Event<br>3. Book Event<br>4. Track Students in courses.<br>5. Apply for Exam.<br>6. Add News and info<br>7. Update News and info.<br>8. Apply to become Examiner.<br>9. Login | 1. When logged in Internal Teachers can teach a course.<br>2. When logged in Internal Teachers can hold an event.<br>3. When logged in Internal Teachers can book an event.<br>4. When logged in Internal Teachers can see what students are in their course.<br>5. When logged in Internal Teachers can apply for musical exams.<br>6. When logged in Internal Teachers can add news and info to the website.<br>7. When logged in Internal Teachers can update news and info to the website.<br>8. When logged in Internal Teachers can apply to become an examiner.<br>9. Internal Teachers can Login to the staff portal. | Internal |

| | | | |
|---|---|---|---|
| Non-Registered General Users | 1. Order Book<br>2. Pay for Event.<br>3. Book Event. | 1. Users can Order books without being logged in.<br>2. Users can pay for events without being logged in.<br>3. Users can book an event without being logged in. | External |
| Registered Students | 1. Apply for Course.<br>2. Book Event.<br>3. Login.<br>4. Upload course submissions. | 1. When logged in Students can apply for a course.<br>2. When logged in Students can book an event.<br>3. Students can Login.<br>4. When logged in Students upload course submissions. | Internal |
| Examiners | 1. Login<br>2. Book Exam Supervision. | 1. Examiners can login.<br>2. Examiners can book exam supervision. | Internal |
| Administration | 1. Add Course.<br>2. Delete Member.<br>3. Update Member Details.<br>4. Add Results.<br>5. Login. | 1. When logged in Administrators can add a course.<br>2. When logged in Administrators can delete a member.<br>3. When logged in Administrators can update a member.<br>4. When logged in Administrators can add results.<br>5. Administrators can login. | Internal |

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# DOCUMENTS AND REQUIREMENTS

## LIST OF DOCUMENTS

### Invoice

time-stamped business report that separates and records an exchange between a purchaser and a merchant. If merchandise, or administrations were bought using a loan, the receipt ordinarily determines the details of the arrangement and gives data on the accessible strategies for installment.

### Receipt

record which is given by a business to its clients each time an item or administration is sold. It is a purchaser's verification of procurement. Commonly it will show: the date and season of the buy. the quantity of things bought and value sums.

### Booking a course

Keeps the details of the customer information (name , email, address, qualifications and instrument of customer) and the courses information e.g like the type of course, the instrument used for course and the course grade, the payment of the course.

### Credit note

record which is given by a business to its clients each time an item or administration is sold. It's a purchaser's verification of procurement. Commonly it will show: the date and season of the buy. the quantity of things bought and value sums.

### Purchasing a book

When a book is ordered online the information of the customers details ( name address email) ,payment( credit card and debit card details) , delivery (address, delivery date) and the details of the book(name price availability ) will be kept.

### Booking a course

Keeps the details of the customer information and the courses information e.g. like the type of course, the instrument used for course and the course grade, the payment of the course.

### Booking examination

When booking a examination the details needed would be the customer information (name, instrument, age, email, number). The details of the exams (course exam, price, time, date and location). Payment details (credit card and debit card details)

### 1 on 1 tuition

Would be the personal details of the person making the booking (name, instrument, age, email, number) and the timetable and the persons previous grades.

### Application by teacher

This will provide the details of the person writing the application (name age, email, number). The job details. The qualifications of the person.

### Booking a event

Booking a event would need the customer details (name, email phone number). The event details (name of event, location, date, and time). Payment information (credit card and debit card details).

## INTAIL LIST OF REQUIREMENTS

### Admin

- Add/update/delete/view admins
- Add/update/delete/view course,
- Add/update/delete/view students and teachers,
- Add/update/delete/view students results
- Add/update/delete/view books
- Add/update/delete/view exams
- Add/update/delete/view 1 on 1 tuitions
- Add/update/delete/view events
- Add/update/delete/view examiners
- Write reports
- Send materials for repairs

### Teachers (In SOAM)

- Oder books
- Access to staff portal.
- View their courses details.
- Booking a stage hall.
- Find students courses.
- View timetables, exams centers.
- Apply to be examiner
- View exam centers
- View forms

## Teachers (not in SOAM)

- Oder books
- Register for course
- Access to the sub staff portal
- Apply for courses
- Book stage hall
- Book events
- Apply for exams
- Apply to be examiner
- View exam centers
- View timetables

## Students

- Oder books
- Book events
- different event
- accesses student portal
- view courses details
- view events
- view tuitions
- book tuitions

## Examiners

- Access to examiners portal
- View exam centers
- View exam details (dates, times)
- Book available supervision times

## User

- Oder books
- Register for course
- Register for events
- View course details (price, level, name)