

# Team Collated Documentation

**\*\*Project\*\***: School Activity Booking System

**\*\*Team\*\***: Sanchit, Chichebendu, Shiva, Sharjeel

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## The Big Picture - What We Built

We built a complete **\*\*School Activity Booking Website\*\***.

**\*\*Imagine Amazon, but for School Clubs\*\***:

- Parents can shop for clubs (Swimming, Math, Art)
- They add to cart and pay
- They get receipts and calendar invites
- Teachers get class lists
- Admins manage everything

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## Who Did What? (The Dream Team)

We divided the work so everyone had a special job.

### 1. **Sanchit Kaushal (The Leader & Guard)**

**\*\*Role\*\***: Security & Admin

- **\*\*Analogy\*\***: He built the building, the locks on the doors, and the manager's office.
- **\*\*Key Jobs\*\***:
  - Login system (Who are you?)
  - Security (Keep hackers out)
  - Admin Panel (Control room)
  - Putting it on the internet

### 2. **Chichebendu Blessed Umeh (The Messenger)**

**\*\*Role\*\***: Emails & Integration

- **\*\*Analogy\*\***: He is the postman and the secretary.
- **\*\*Key Jobs\*\***:
  - Sending confirmation emails
  - Creating PDF invoices
  - Making calendar invites
  - Teacher's portal

### 3. **Shiva Kasula (The Brain)**

**\*\*Role\*\***: Database & Logic

- **\*\*Analogy\*\***: He is the filing clerk and the bouncer.
- **\*\*Key Jobs\*\***:
  - Database (Storing info)
  - Rules (No double bookings!)
  - Waitlist (The queue)
  - Payments (The cash register)

### 4. **Mohd Sharjeel (The Artist)**

**\*\*Role\*\***: UI/UX Design

- **\*\*Analogy\*\***: He is the interior decorator and painter.
- **\*\*Key Jobs\*\***:
  - Colors and Fonts (The look)

- Mobile friendly (Works on phones)
- Dashboard design (Easy to use)
- Visual effects (Glassmorphism)

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## How It All Works Together

**\*\*Follow the Journey of a Booking\*\*:**

**\*\*Step 1: The Visit (Sharjeel's Work)\*\***

- Parent visits website on their phone.
- It looks beautiful and fits the screen perfectly.
- They see "Swimming" with a Green "Available" badge.

**\*\*Step 2: The Login (Sanchit's Work)\*\***

- Parent clicks "Login".
- Types password.
- Sanchit's security checks the password hash.
- Access Granted!

**\*\*Step 3: The Booking (Shiva's Work)\*\***

- Parent clicks "Book Swimming".
- Shiva's logic checks: "Is it full?", "Did they pay?"
- Everything OK? -> Save to Database.

**\*\*Step 4: The Confirmation (Chichebendu's Work)\*\***

- Immediately, an email is sent.
- "Ding!" Phone buzzes.
- PDF Invoice attached.
- Calendar event added to phone.

**\*\*Step 5: The Class (Everyone)\*\***

- Teacher logs in (Sanchit)
- Checks list (Shiva)
- Marks attendance (Chichebendu)
- On a beautiful interface (Sharjeel)

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## Technologies We Used (The Tools)

| Tool | What It Is | Why We Used It |

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| **\*\*Python\*\*** | Programming Language | Easy to write, powerful |

| **\*\*Flask\*\*** | Web Framework | Builds websites fast |

| **\*\*SQLite\*\*** | Database | Stores our data simply |

| **\*\*HTML/CSS\*\*** | Design Code | Makes it look good |

| **\*\*Git\*\*** | Version Control | Lets us work together without overwriting |

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## Challenges We Solved

**\*\*Problem 1: Double Booking\*\***

- **\*Scenario\***: Two parents try to book the LAST spot at the exact same second.
- **\*Solution (Shiva)\***: "Database Transactions". The computer freezes for 0.01 seconds, lets one in, and tells the other "Sorry, full!"

**\*\*Problem 2: Emails going to Spam\*\***

- **\*Scenario\***: Emails looked fake, so Gmail blocked them.
- **\*Solution (Chichebendu)\***: Used professional SMTP settings and proper HTML templates. Now they hit the Inbox every time.

**\*\*Problem 3: Hackers\*\***

- **\*Scenario\***: Bad people trying to fake forms.

- \*Solution (Sanchit)\*: CSRF Tokens. Secret codes on every form that hackers can't guess.
- \*\*Problem 4: Ugly on Phones\*\***
- \*Scenario\*: Website looked good on laptop, but tiny on phone.
  - \*Solution (Sharjeel)\*: "Responsive Design". The website changes shape like water to fit the phone.
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## Conclusion

We built a professional, secure, and beautiful system. It solves a real problem for schools (messy paper forms) and makes life easier for parents, teachers, and admins.

**\*\*Project Status\*\***: ■ Complete & Ready for Use!