**Lotus Valley International School Gurugram**

# <Insert title>: a bot to solve student troubles

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**Abstract—**This project, <name>, is a chatbot that is designed to solve the most frustrating that students face in their daily lives. From struggling to find assignments to needing help with their cumbersome homeworks, this chatbot can do it all — all while being reliable and easy to use.

**Keywords—***shiv-nadar.vercel.app*

## Contents



## 1. Introduction

Welcome to <name>, the chatbot to solve it all. This bot is designed to fulfil your every need as a student: it can find your homework, and it can help you solve it. Utilizing modern frameworks, the bot entails a clean, functional UI, making the power of Python accessible to the layperson. This document is a guide to the inner working of <name>

## 2. Technologies Used

1. NextJS (frontend)
    - Shadcn/ui (UI)
    - Better Auth (User Authentication)
2. Python (backend)
    - API calls — FastAPI
    - LLM — PyTorch and Transformers (HuggingFace)
3. PostgreSQL (database)
    - ORM — Drizzle
    - DB provider — Vercel Postgres (Neon)

### 2.1. Frontend

For a fast and responsive frontend, we used NextJS. Its vast ecosystem, and reliability were major perks. It allowed us to create many complex functions effectively. To make NextJS even better, we used Shadcn, a popular UI library that provides accesible base components. For authentication, we used BetterAuth, an open-source authentication library that gives us support for many social logins like Google and Github.

### 2.2. Backend