

fee_patch_tool.py

```
1 from pymongo import MongoClient
2 from config import MONGO_URI
3 from fee_calculator import generate_fee_record, SESSION_MONTHS
4
5 client = MongoClient(MONGO_URI)
6 db = client["class_mgmt"]
7 students = db["students"]
8 fee_records = db["fee_records"]
9
10 def patch_fee_ledgers():
11     print("🔧 Checking and patching fee records...")
12     updated_students = []
13
14     for student in students.find({}, {"_id": 0}):
15         sid = student["Student ID"]
16         fatherless = student.get("Fatherless", False)
17         existing_months = {r["month"] for r in
18 fee_records.find({"student_id": sid})}
19
20         missing_months = [m for m in SESSION_MONTHS if m not in
21 existing_months]
22         if missing_months:
23             print(f"🔧 Student ID {sid} is missing months:
24 {missing_months}")
25             full_ledger = generate_fee_record(sid, fatherless)
26             patch_docs = [r for r in full_ledger if r["month"] in
27 missing_months]
28             fee_records.insert_many(patch_docs)
29             updated_students.append(sid)
30
31         if updated_students:
32             print(f"\n✅ Patched fee records for {len(updated_students)}
33 students.")
34         else:
35             print("✅ All students have complete fee ledgers.")
```