My Project

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Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

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NurseFunctions.h 7
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Chapter 3

Class Documentation

3.1 Nurse Struct Reference

Structure representing a nurse's data.

`#include <NurseList.h>`

Public Member Functions

- int getShiftPreference (int shiftNumber) const
  Gets the shift preference for a specific shift.

Public Attributes

- std::string **fullName**
- int **nurseNumber**
- std::string **nurseType**
- std::string **department**
- std::vector< int > **shiftPreferences**

3.1.1 Detailed Description

Structure representing a nurse's data.

This structure holds information about a nurse, including their full name, nurse number, type (e.g., "RN", "LPN"), department, and shift preferences.

3.1.2 Member Function Documentation

3.1.2.1 getShiftPreference()

```
int Nurse::getShiftPreference (
            int shiftNumber) const  [inline]
```

Gets the shift preference for a specific shift.

Parameters

shiftNumber	The shift number (1-42).

Returns

int The preference for the specified shift (0, 1, 2).

The documentation for this struct was generated from the following file:

- NurseList.h

Chapter 4

File Documentation

4.1 CSVParser.h

```
00001 #ifndef CSV_PARSER_H
00002 #define CSV_PARSER_H
00003
00004 #include <string>
00005
00014 void parseNursesCSV(const std::string& fileName);
00015
00016 #endif // CSV_PARSER_H
```

4.2 NurseFunctions.h

```
00001 #ifndef NURSE_FUNCTIONS_H
00002 #define NURSE_FUNCTIONS_H
00003
00004 #include <string>
00005
00014 void viewNursesByDepartmentAndType(const std::string& department, const std::string& type);
00015
00016 #endif // NURSE_FUNCTIONS_H
```

4.3 NurseList.h

```
00001 #ifndef NURSE_LIST_H
00002 #define NURSE_LIST_H
00003
00004 #include <string>
00005 #include <vector>
00006 #include <unordered_map>
00007
00014 struct Nurse {
00015     std::string fullName;
00016     int nurseNumber;
00017     std::string nurseType;
00018     std::string department;
00019     std::vector<int> shiftPreferences; // Stores preferences for 42 shifts
00020
00027     int getShiftPreference(int shiftNumber) const {
00028         if (shiftNumber >= 1 && shiftNumber <= shiftPreferences.size()) {
00029             return shiftPreferences[shiftNumber - 1];
00030         }
00031         return -1; // Invalid shift number
00032     }
00033 };
00034
00041 extern std::unordered_map<std::string, std::unordered_map<std::string, std::vector<Nurse>>
      departmentNursesMap;
00042
00043 // No need to declare viewNursesByDepartmentAndType here; it's in NurseFunctions.h
00044
00045 #endif // NURSE_LIST_H
```

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