Tampereen ammattikorkeakoulu

Sovellusohjelmoinnin jatkokurssi

Oppimispäiväkirja

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SISÄLLYS

1 Viikkotehtävät

1.1 Teht 1:

main.cpp:

```cpp
#include <iostream>
#include <string>
#include "person.h"
#include "person.cpp"
using namespace std;

int main(){

  {
  Person Kalle;
  Kalle.setName("Kalle");
  Kalle.setAge(20);

  Person Ville;
  Ville.setName("Ville");
  Ville.setAge(23);

  Kalle.salute();
  Ville.salute();

  int x1 = Kalle.getAge();
  int x2 = Ville.getAge();

  cout << "Kalle is" << x1 << " years old." << endl;
  cout << "Ville is" << x2 << " years old." << endl;
  }

return 0;
}
```

person.cpp:

```cpp
#include <string>

using namespace std;

class Person {
    private:
        string name;
        int age;
    public:
    void salute();
    void setAge(int newAge);
    int getAge();
    void setName(string newName);
    string getName();
};
```

person.h:

```cpp
#include <string>

using namespace std;

class Person {
    private:
        string name;
        int age;
    public:
    void salute();
```

```cpp
    void setAge(int newAge);
    int getAge();
    void setName(string newName);
    string getName();
};
```

1.2 Teht 2:

main.cpp:

```cpp
#include <iostream>
#include <string>
#include "date.h"
#include "date.cpp"
using namespace std;

int main(){

    {
    Date date1;
    date1.setDate(1);
    date1.setMonth(1);
    date1.setYear(2020);

    Date date2;
    date2.setDate(2);
    date2.setMonth(2);
    date2.setYear(2020);

    date1.printDate();
    date2.printDate();
    }
    return 0;
}
```

date.cpp:

```cpp
#include <iostream>
#include <string>
#include "date.h"
#include "date.cpp"
using namespace std;

int main(){

   {
   Date date1;
   date1.setDate(1);
   date1.setMonth(1);
   date1.setYear(2020);

   Date date2;
   date2.setDate(2);
   date2.setMonth(2);
   date2.setYear(2020);

   date1.printDate();
   date2.printDate();
   }
   return 0;
}
```

date.h:

```cpp
#include <string>

using namespace std;

class Date {
   private:
```

```cpp
        int date;
        int month;
        int year;

        public:
    void setDate(int newDate);
    void setMonth(int newMonth);
    void setYear(int newYear);
    int getDate();
    int getmMonth();
    int getYear();
    void printDate(string format);
    void printDate();
};
```

1.3 Teht 3:

main.cpp:

```cpp
#include <iostream>
#include <string>
#include "date.h"
#include "date.cpp"
using namespace std;

int main() {
    Date date1;
    date1.askDate();
    date1.printDate();

    date1.addOneDay();
    date1.printDate();

    return 0;
}
```

date.cpp:

```cpp
#include "date.h"
#include <iostream>

using namespace std;

class Date {
public:
    void setDate(int newDate);
    int getDate();
    void setMonth(int newMonth);
    int getMonth();
    void setYear(int newYear);
    int getYear();
    void printDate();
    void printDate(string format);
    void askDate();
    void addOneDay();
private:
    int date;
    int month;
    int year;
};

void Date::setDate(int newDate) {
    date = newDate;
}

int Date::getDate() {
    return date;
}

void Date::setMonth(int newMonth) {
    month = newMonth;
```

```cpp
}

int Date::getMonth() {
    return month;
}

void Date::setYear(int newYear) {
    year = newYear;
}

int Date::getYear() {
    return year;
}

void Date::printDate() {
    cout << date << "/" << month << "/" << year << endl;
}

void Date::printDate(string format) {
    // Implement custom format printing if needed
}

void Date::askDate() {
    cout << "Enter day: ";
    cin >> date;
    cout << "Enter month: ";
    cin >> month;
    cout << "Enter year: ";
    cin >> year;
}

void Date::addOneDay() {
    date++;
    if (date > 30) { // Simplified month length handling
        date = 1;
```

```
            month++;
            if (month > 12) {
                month = 1;
                year++;
            }
        }
}

date.h:

#include <string>

using namespace std;

class Date {
    private:
        int date;
        int month;
        int year;

        public:
    void setDate(int newDate);
    void setMonth(int newMonth);
    void setYear(int newYear);
    int getDate();
    int getmMonth();
    int getYear();
    void printDate(string format);
    void printDate();
    void askDate();
    void addOneDay();
};
```

2 Viikkotehtävät

3   Viikkotehtävät

4 Viikkotehtävät

5 Viikkotehtävät

6   Viikkotehtävät