

**IE206 Project Report**

**2021-2022 Spring**

***Scheduling for a Local Hospital***

*Academic integrity is expected of all students of METU at all times, whether in the presence or absence of members of the faculty.*

*Understanding this, we declare that we shall not give, use, or receive unauthorized aid in this project.*

*Student ID Number Full Name Signature*

**2444974 Cafer Selli** 

**2587848 Zeynep Beril Şahin** metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

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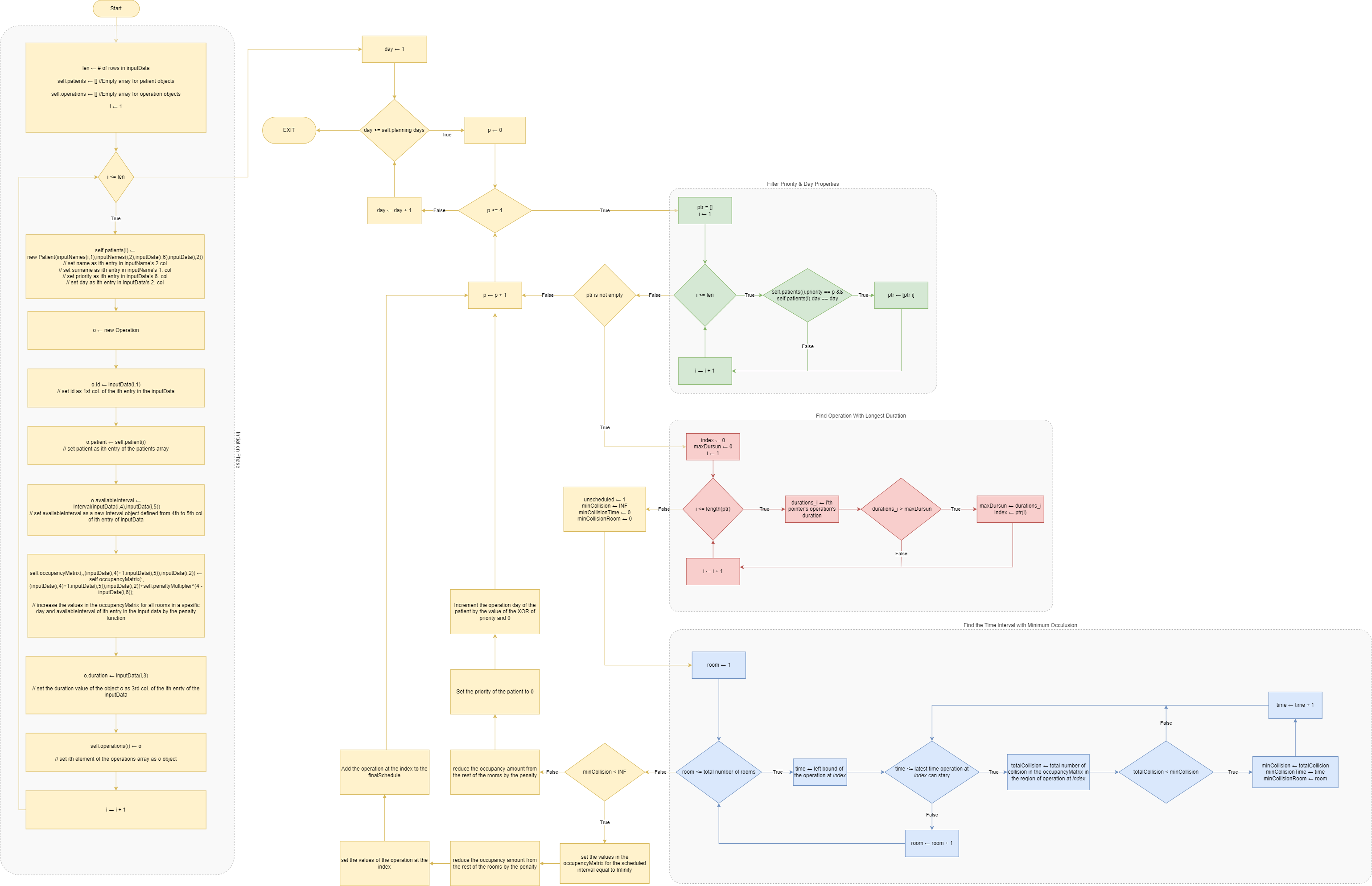
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Introduction

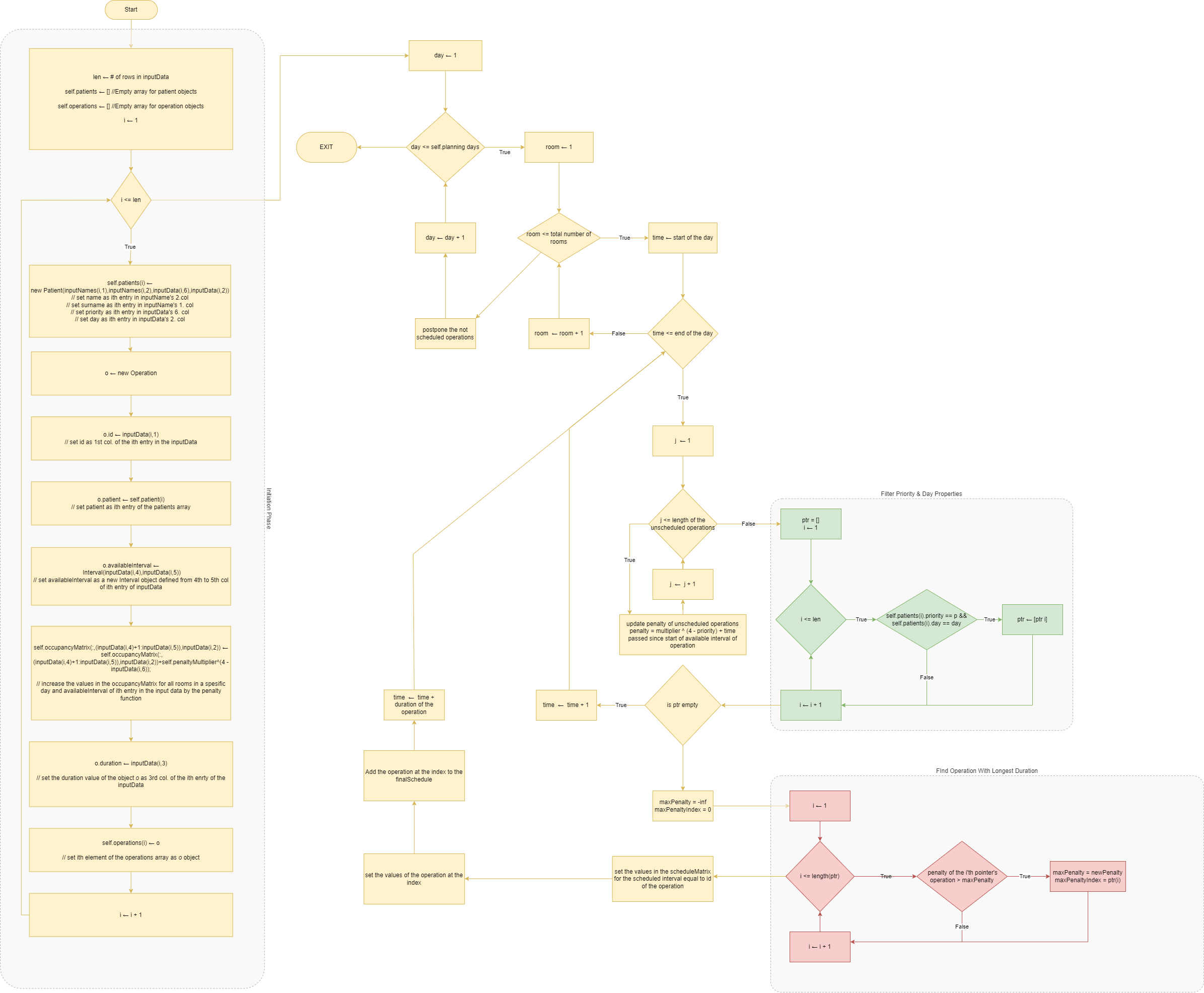
Solving scheduling problems of institutions enables decision-makers to develop and implement more efficient policies that directly serve the needs and expectations. By implementing these policies, resources are used in the most efficient and purposeful way.

This project embraces two different heuristics to solve the scheduling problem of operations in a hospital with a given number of rooms and a given time interval. For the given two different objective functions, which may differ in real life, the heuristics are transformed into algorithms to adjust the scheduling of operations expediently.

Objective 1

 Flowchart of the Algorithm

Objective 2

 Flowchart of the Algorithm

Conclusion

In this project, we designed algorithms based on heuristics for different objective functions and used these algorithms to schedule operations in a three-room local hospital. Based on approaches and scheduling obtained in this project, decision-makers of the local hospital could make their decision regarding the use of resources.

One of the findings of this project is that……

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