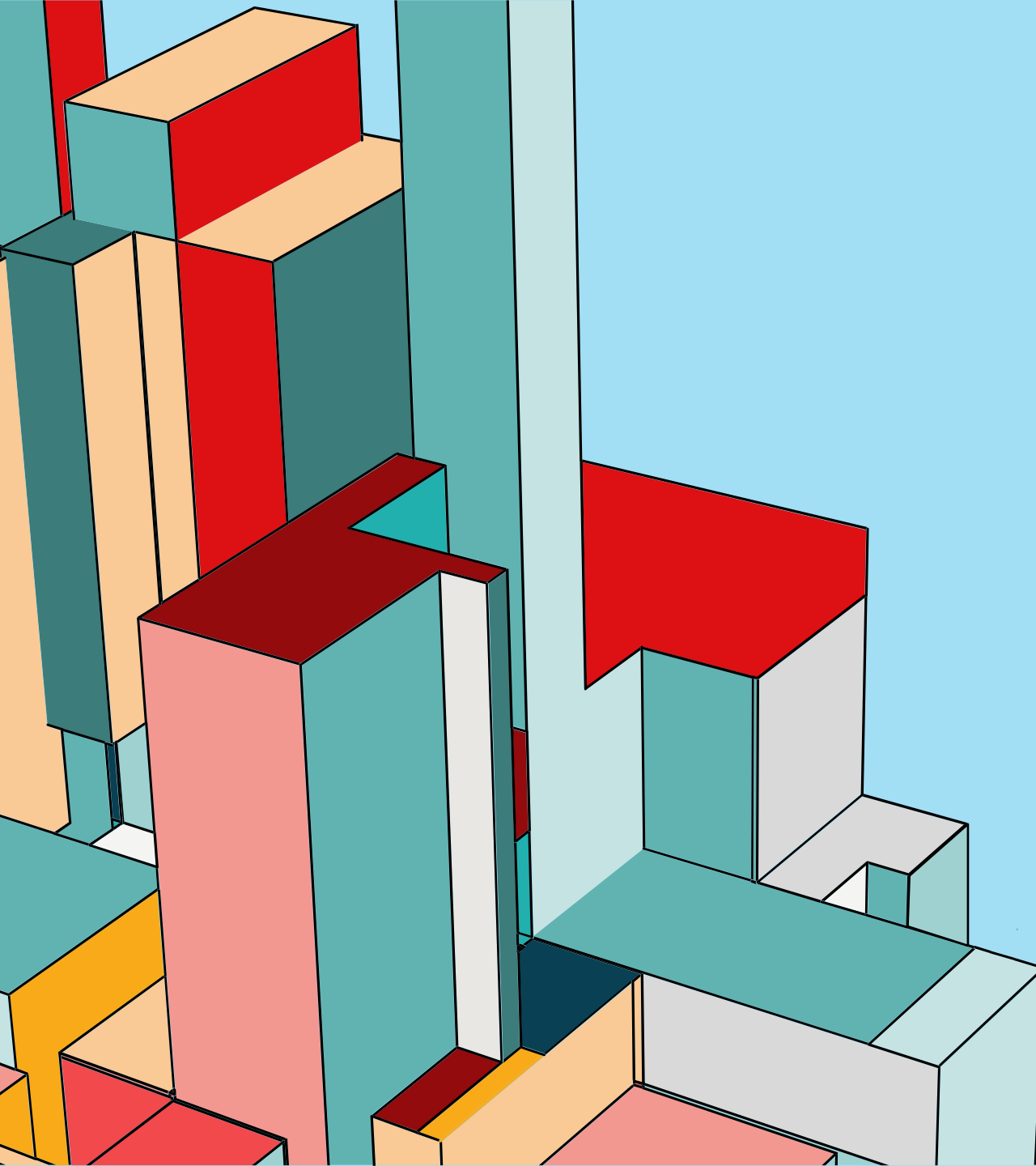


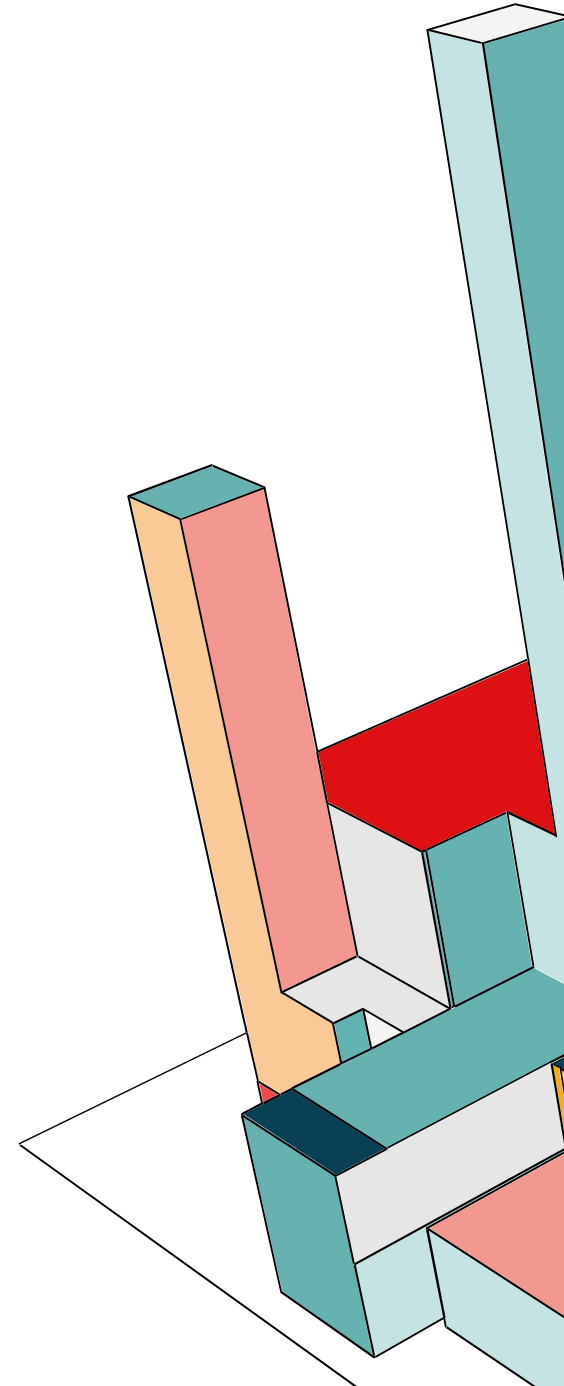


ALCOR PRESENTATION

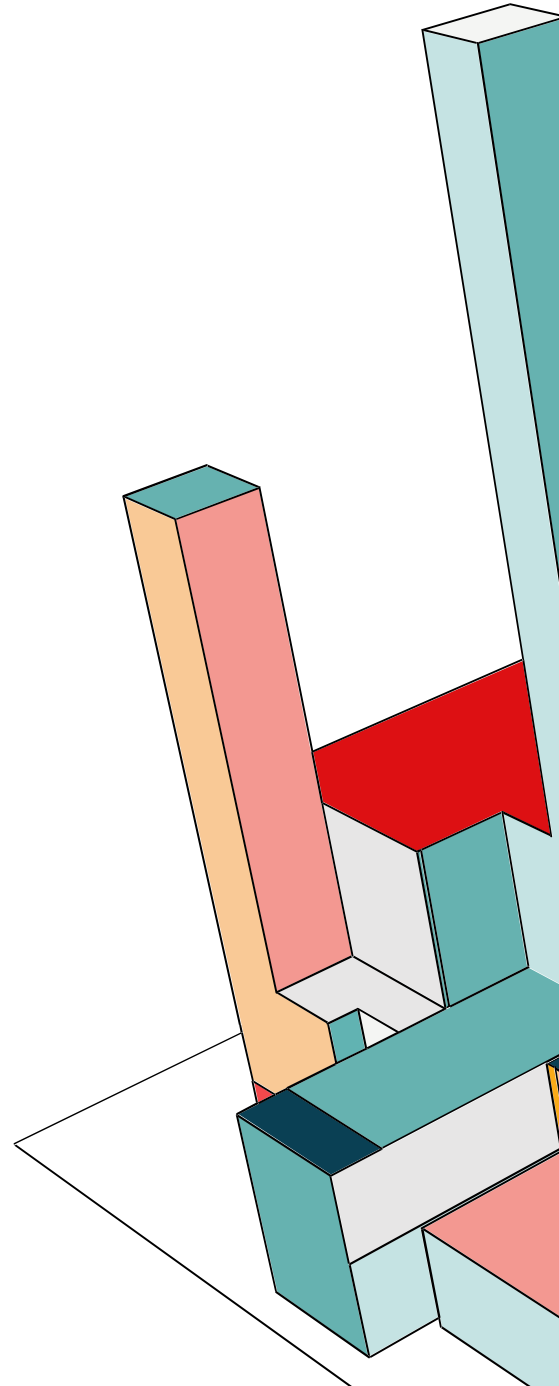
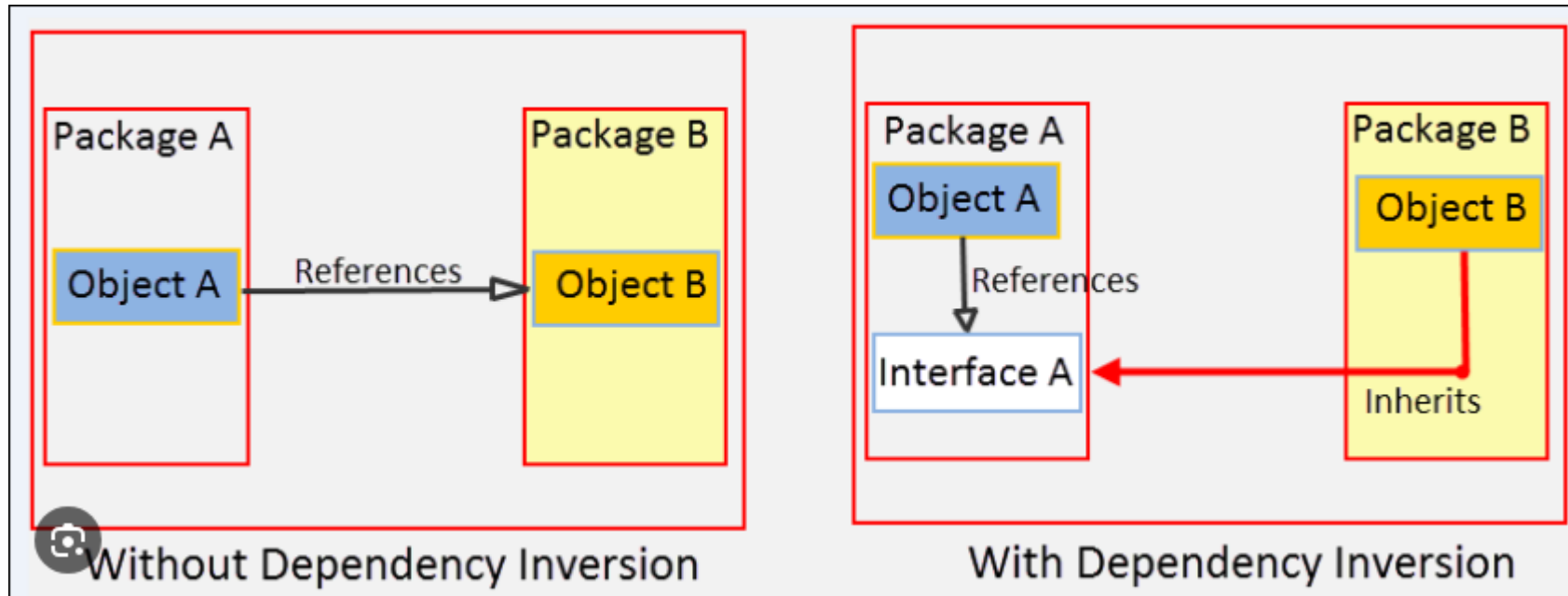
MODULE 2

AGENDA

- Dependency Inversion
- Hexagonal architecture
- Ports and adapters
- Example

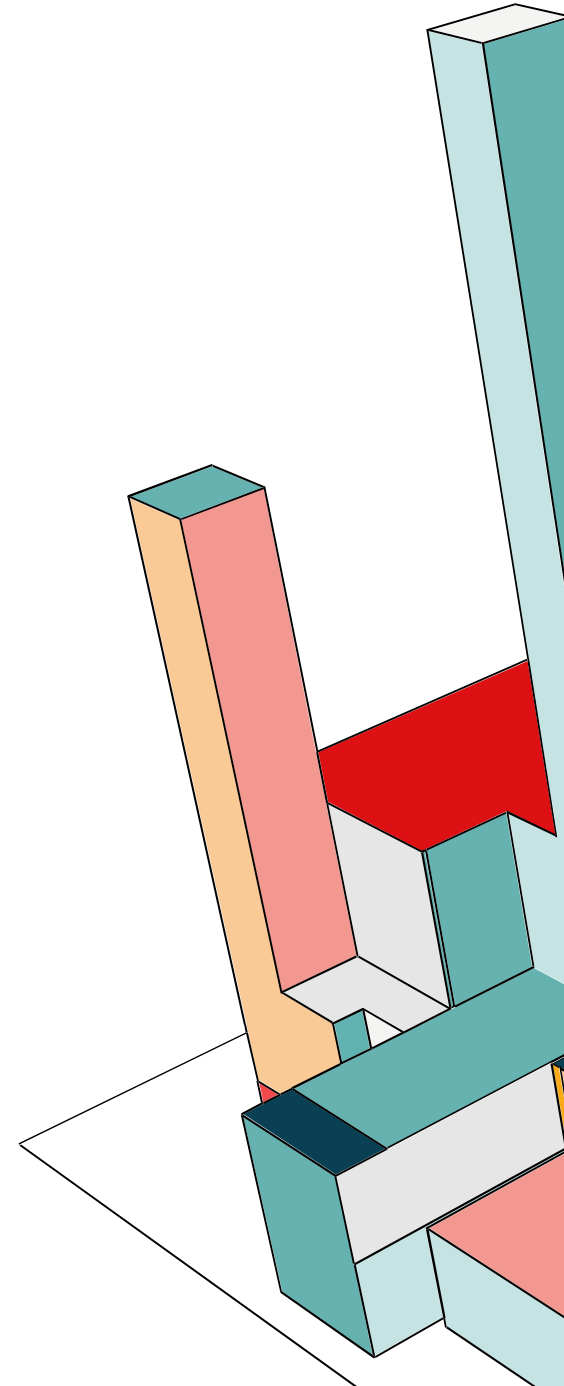


DEPENDENCY INVERSION



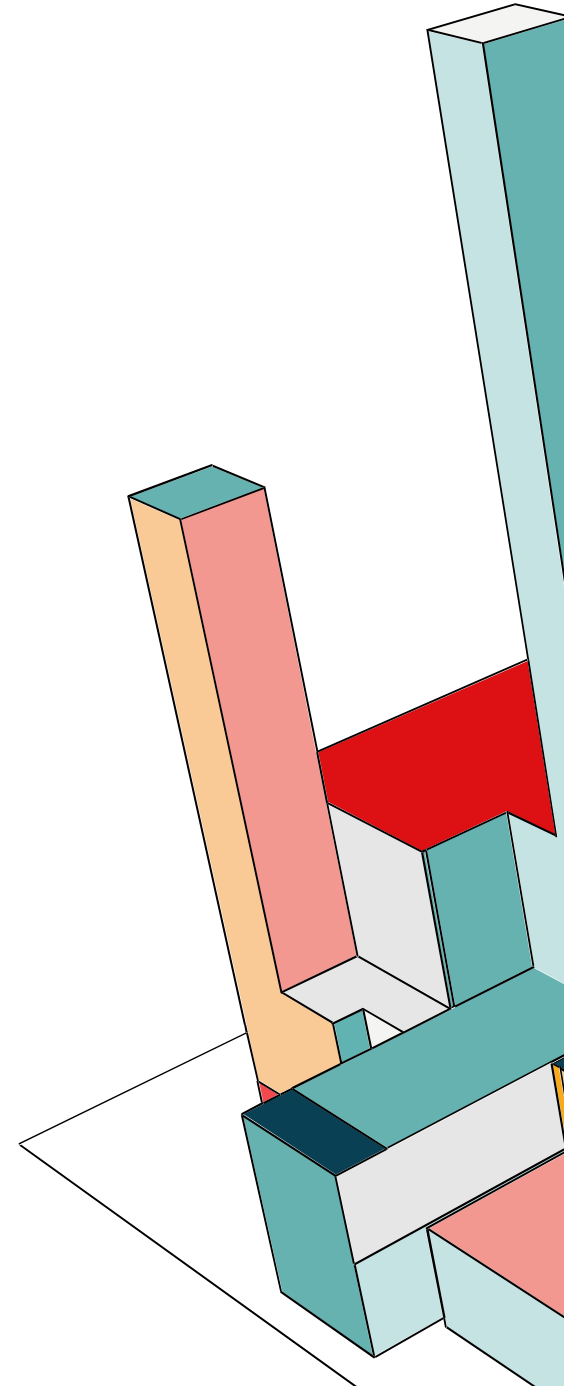
HEXAGONAL ARCHITECTURE

- Create loosely coupled software components.
- Outer cores should only depend on the inner cores.
- Components will be replaceable and testable.

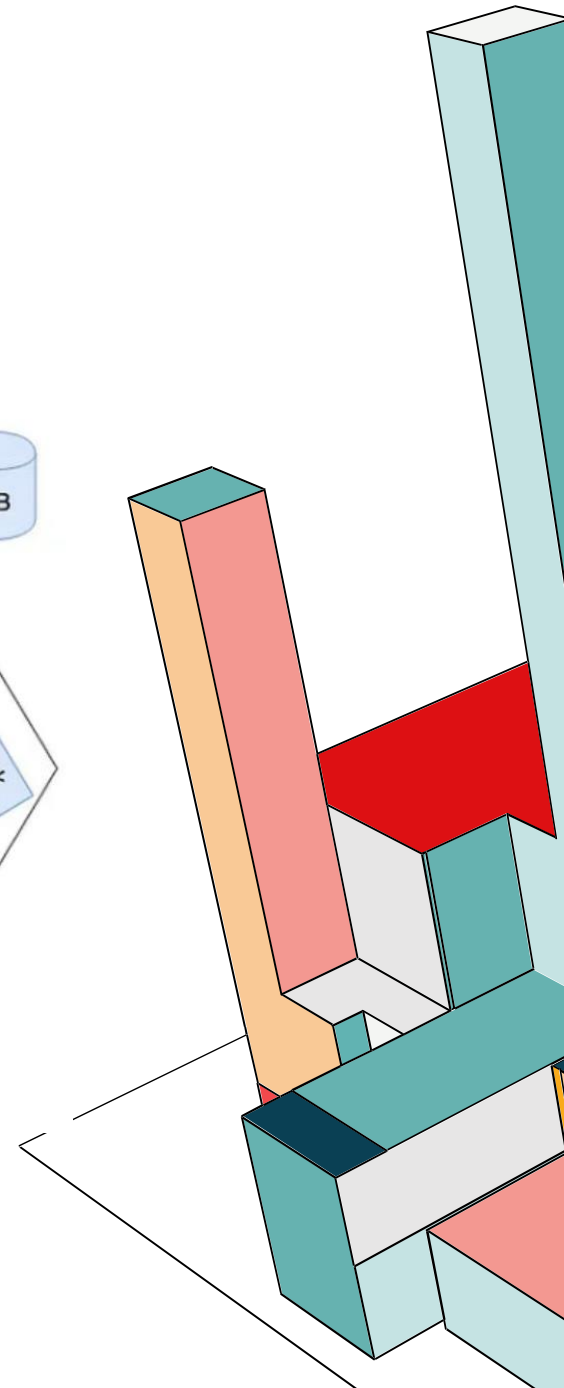
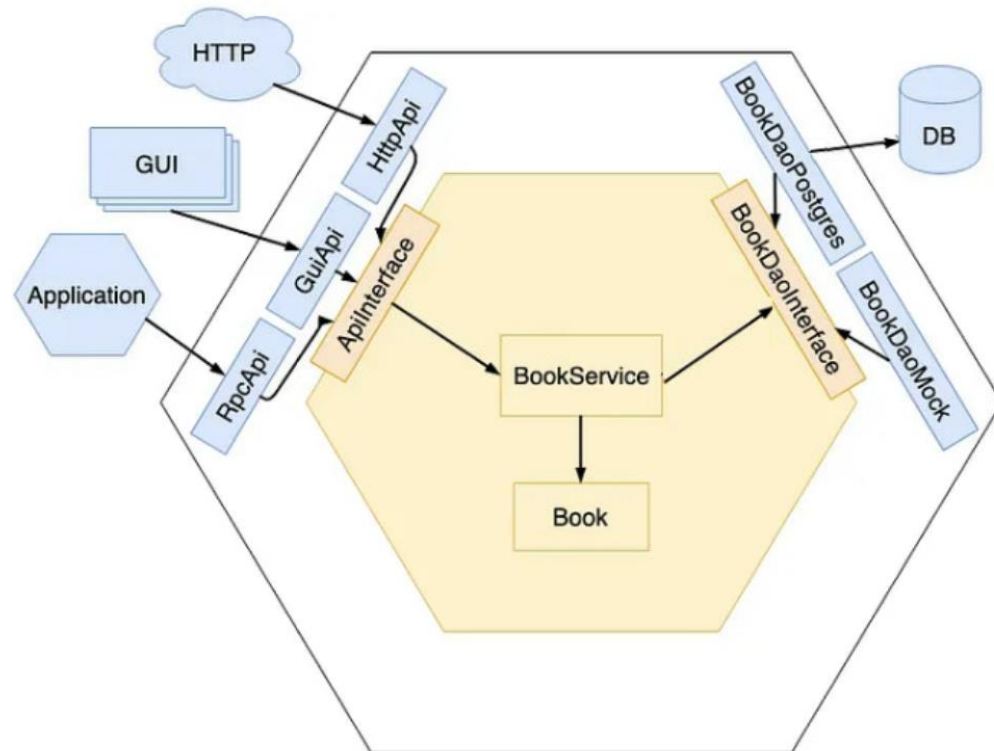
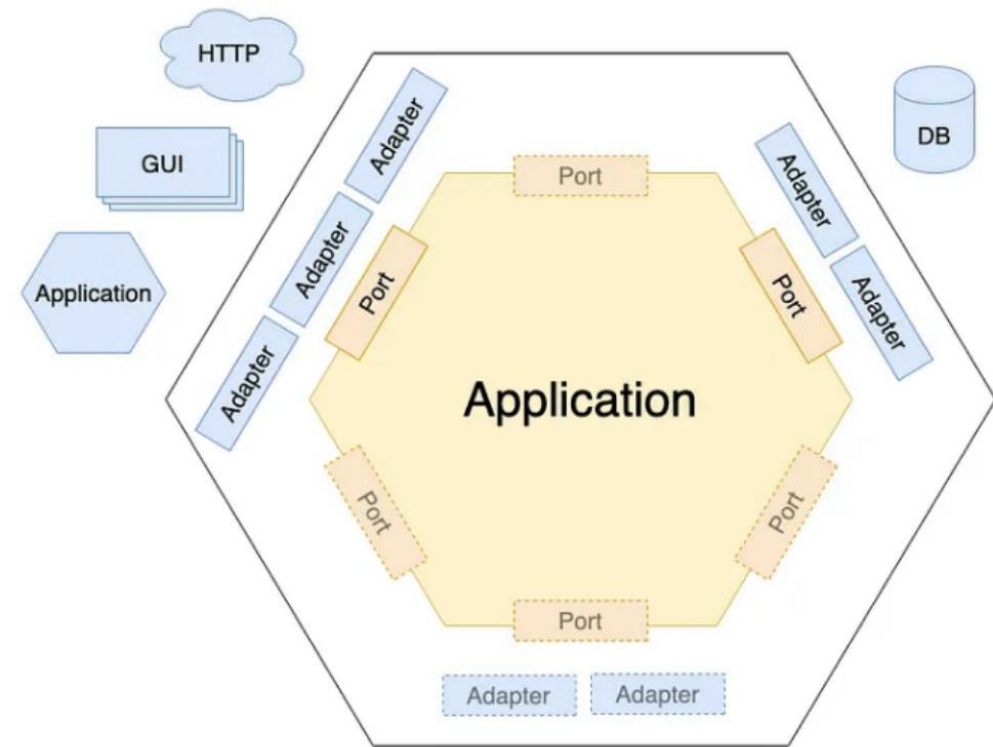


PORTS AND ADAPTERS

- Port: Interface.
- Adapter: Implementation of that interface.



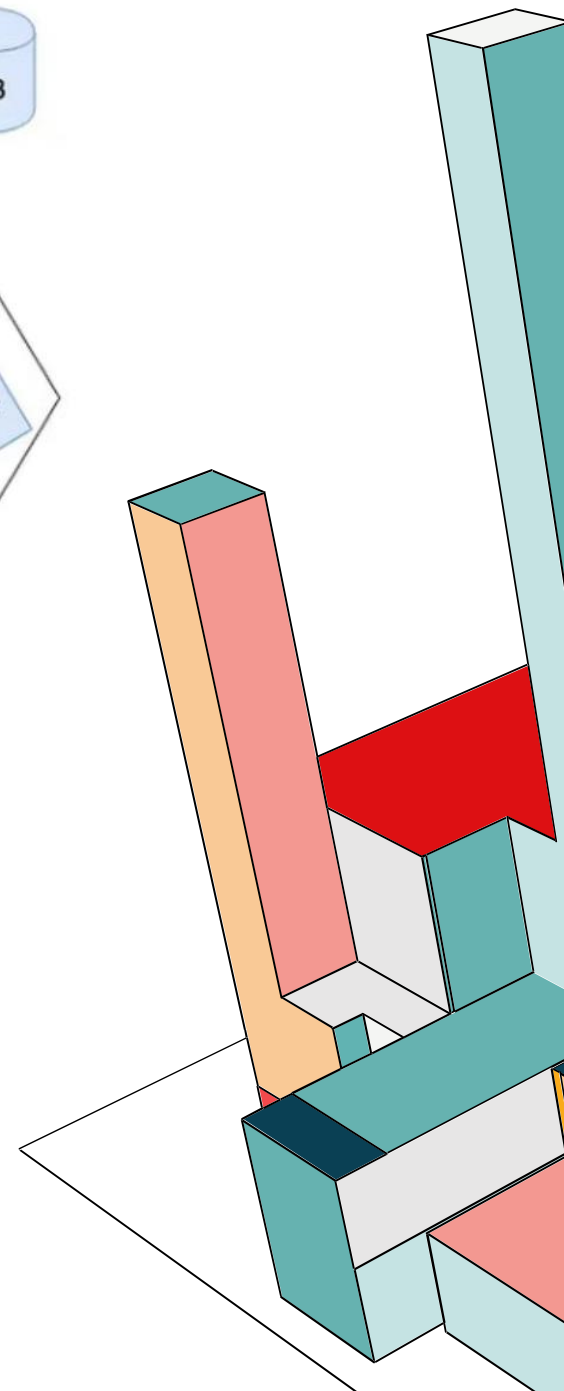
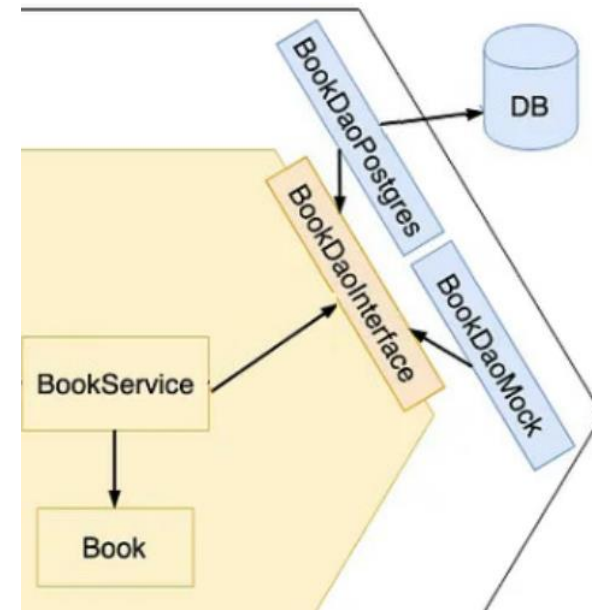
EXAMPLE



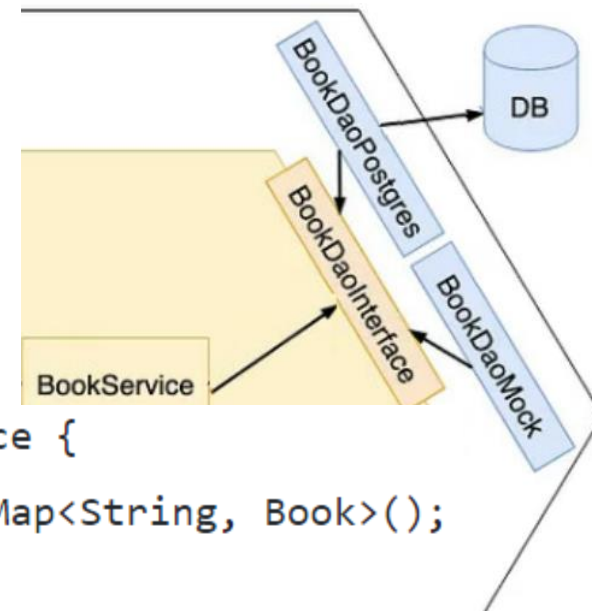
EXAMPLE

```
1 public interface BookDaoInterface {  
2     Book get(String isbn);  
3 }
```

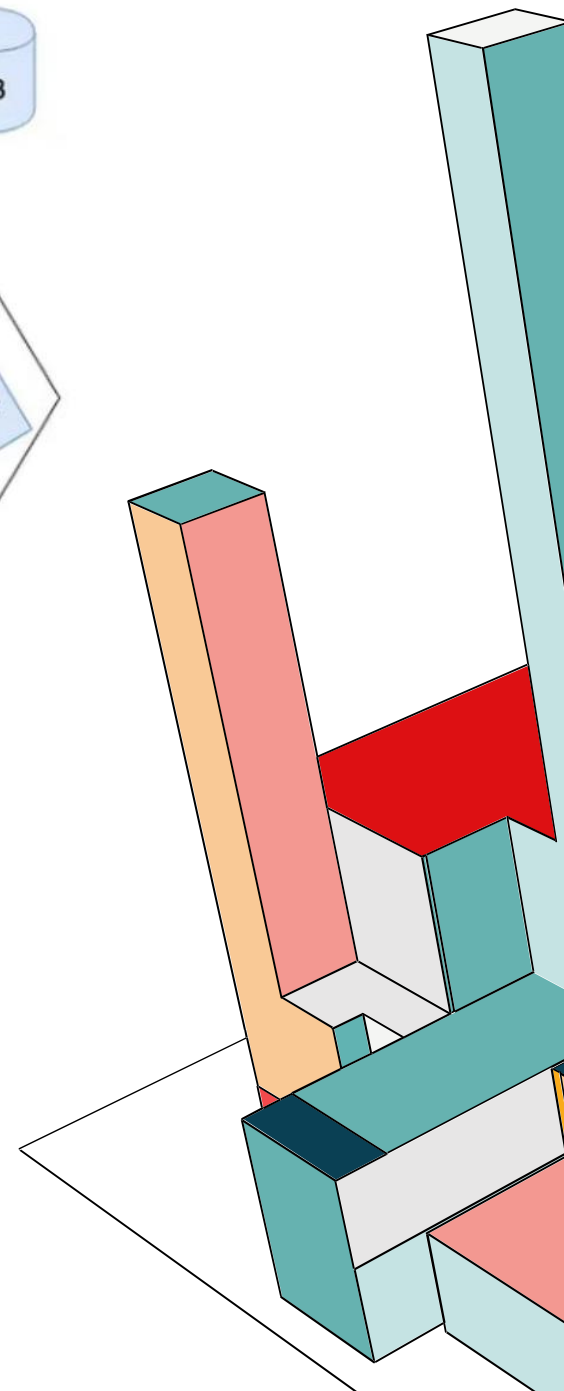
```
1 public class BookDaoPostgres implements BookDaoInterface {  
2     public Book get(String isbn) {  
3         // TODO implement PostgreSQL logic here  
4         return null;  
5     }  
6 }
```



EXAMPLE

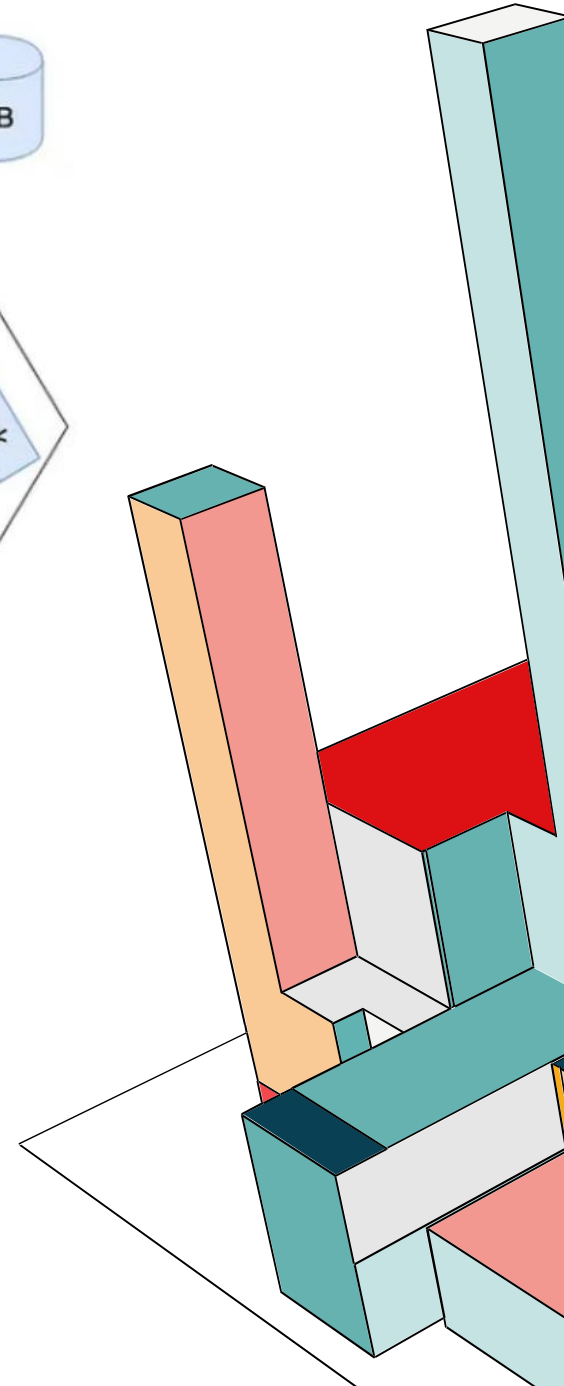
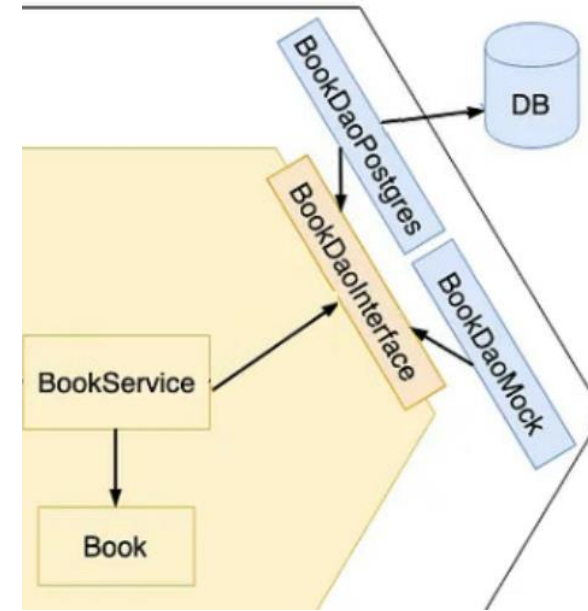


```
1  public class BookDaoMock implements BookDaoInterface {
2      private HashMap<String, Book> books = new HashMap<String, Book>();
3
4      public BookDaoMock() {
5          books.put("mock", new Book("mock", "mock", "mock"));
6      }
7
8      public Book get(String isbn) {
9          return books.get(isbn);
10     }
11 }
```



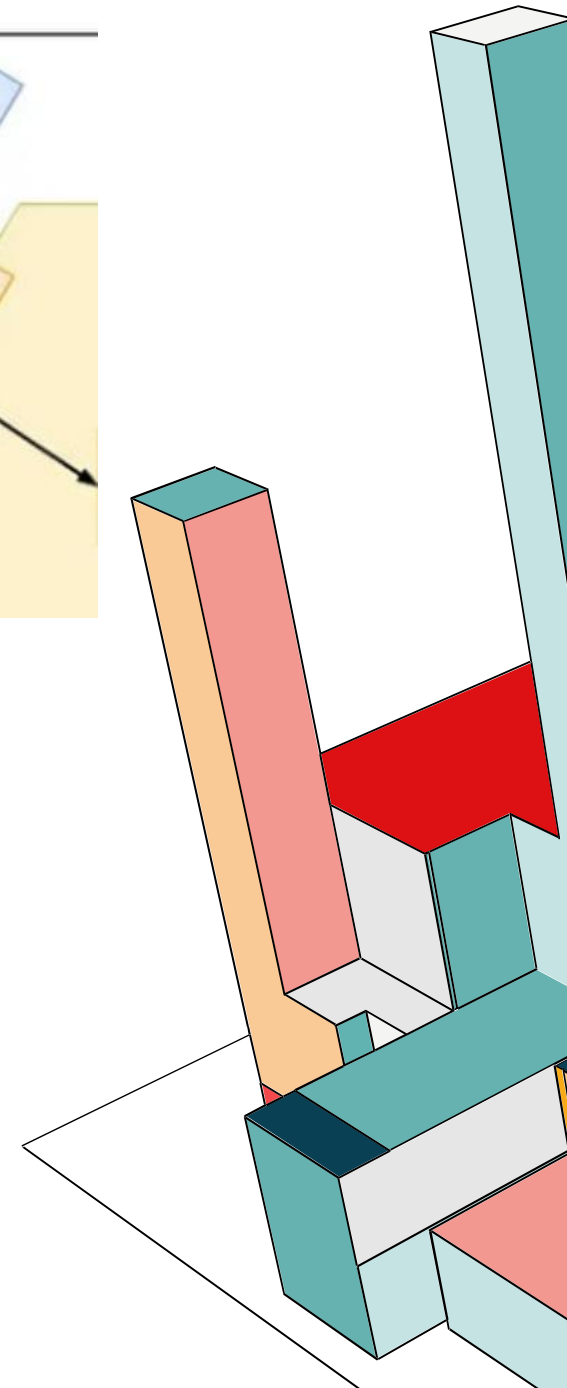
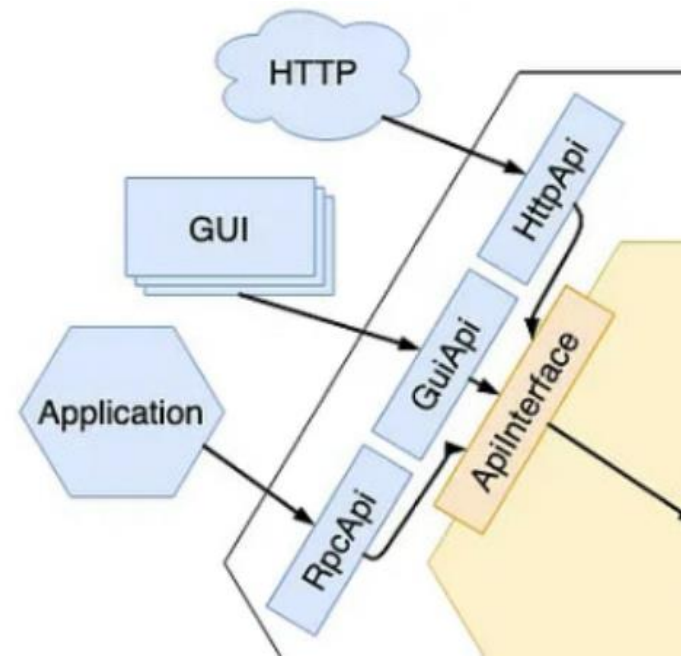
EXAMPLE

```
1  public class BookService {  
2      private BookDaoInterface dao;  
3  
4      public BookService(BookDaoInterface bookDao) {  
5          dao = bookDao;  
6      }  
7  
8      public Book search(String isbn) {  
9          return dao.get(isbn);  
10     }  
11 }
```



EXAMPLE

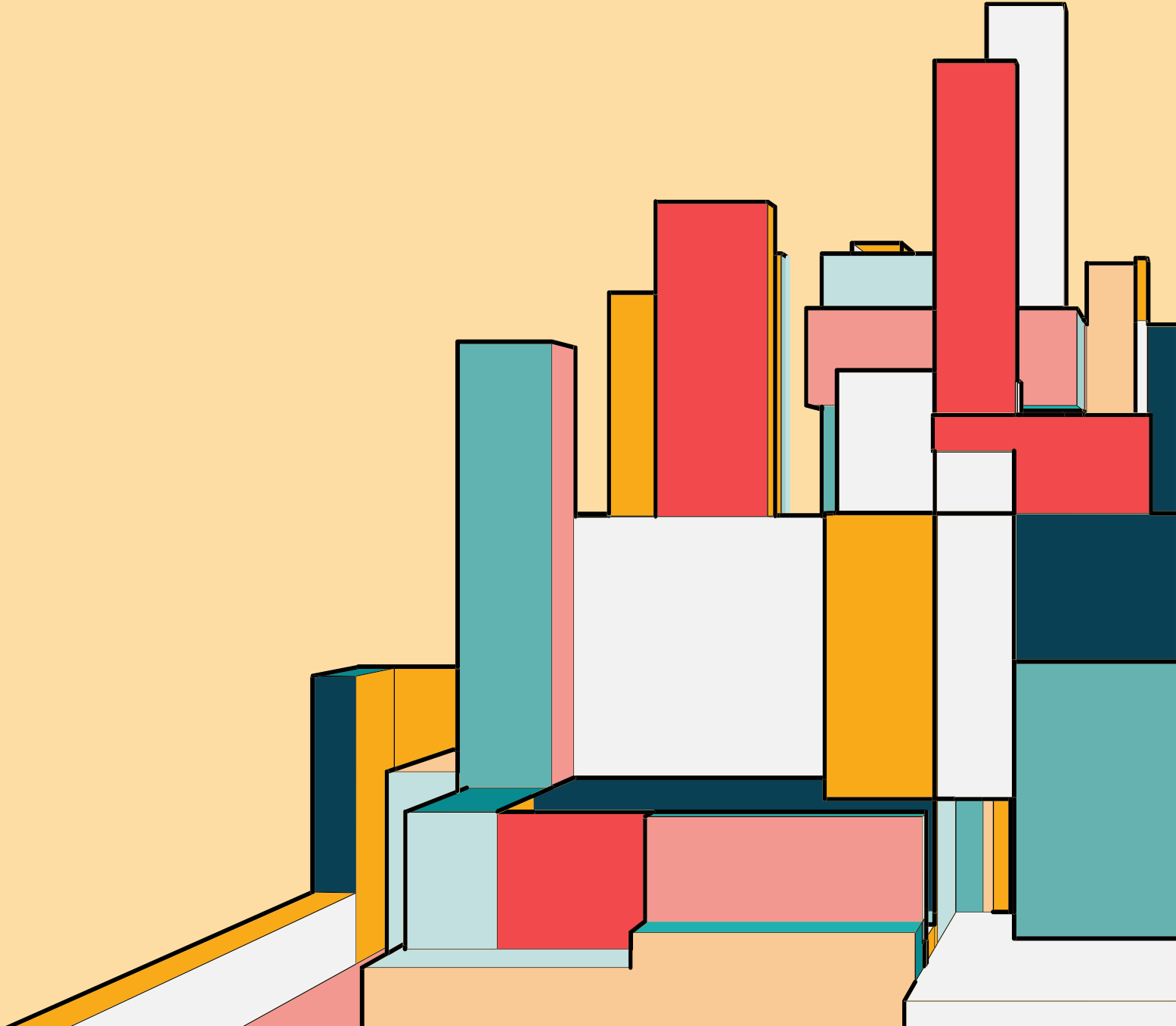
```
1  public interface ApiInterface {
2      Book get(String isbn);
3  }
4
5  public class HttpApi implements ApiInterface {
6      private BookService service;
7
8      public HttpApi(BookService service) {
9          this.service = service;
10     }
11
12     // TODO implement HTTP endpoint
13     public Book get(String isbn) {
14         return service.search(isbn);
15     }
16 }
```



THANK YOU QUESTIONS?

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LINKS

<https://medium.com/swlh/hexagonal-architecture-in-java-b980bfc07366>

