Demonstration of types of COVID-19 virus and its mechanism

Team 18

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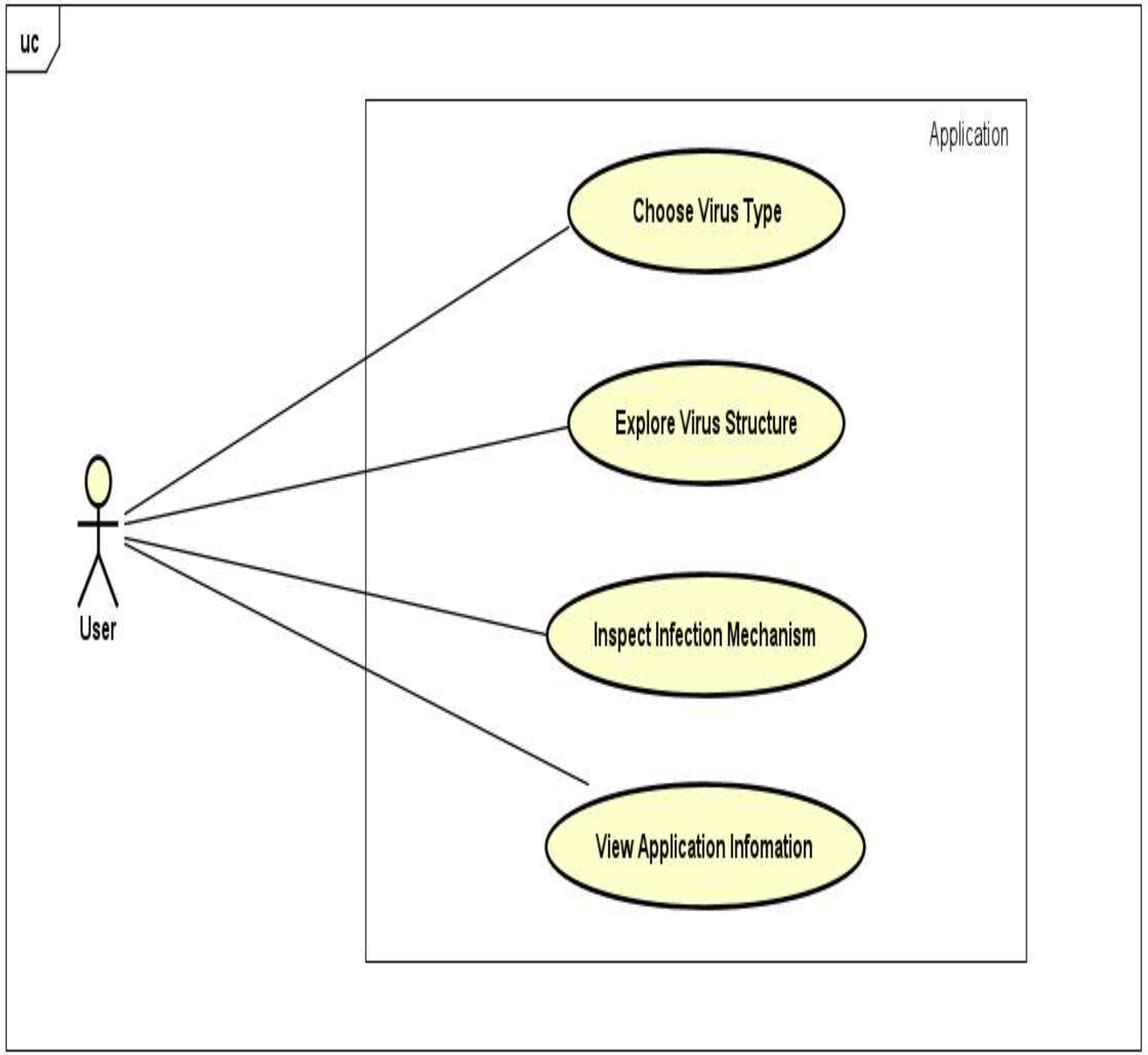
Problem statement

- Users can select a type of virus
- Study the structure of each virus
- Observe the infection mechanism of each virus

USE CASE DIAGRAM



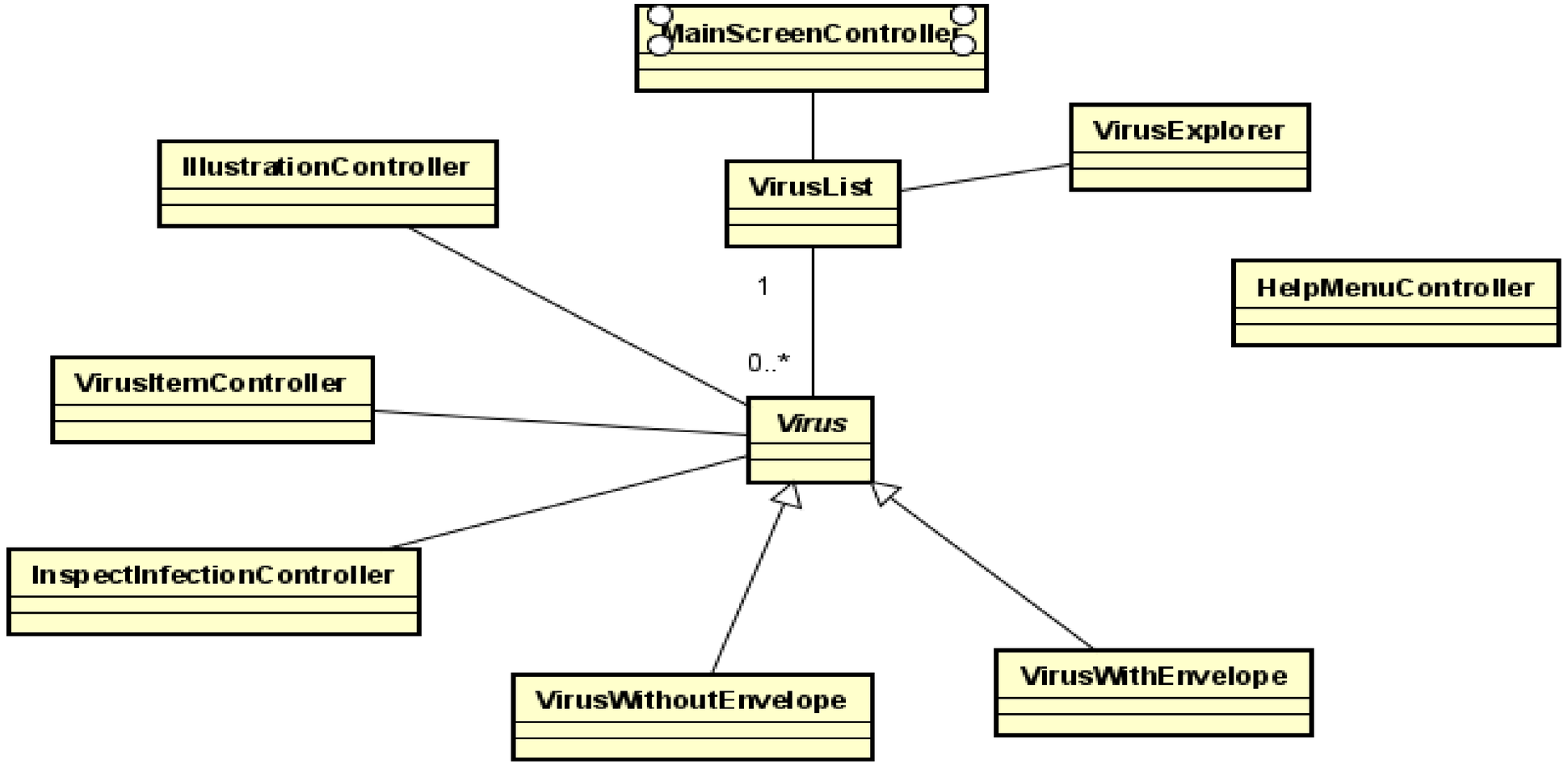
- **Choose Virus Type: user can choose one of the two types of viruses with and without lipid envelope.**

- **Explore Virus Structure: user can view the structure image of the selected virus.**

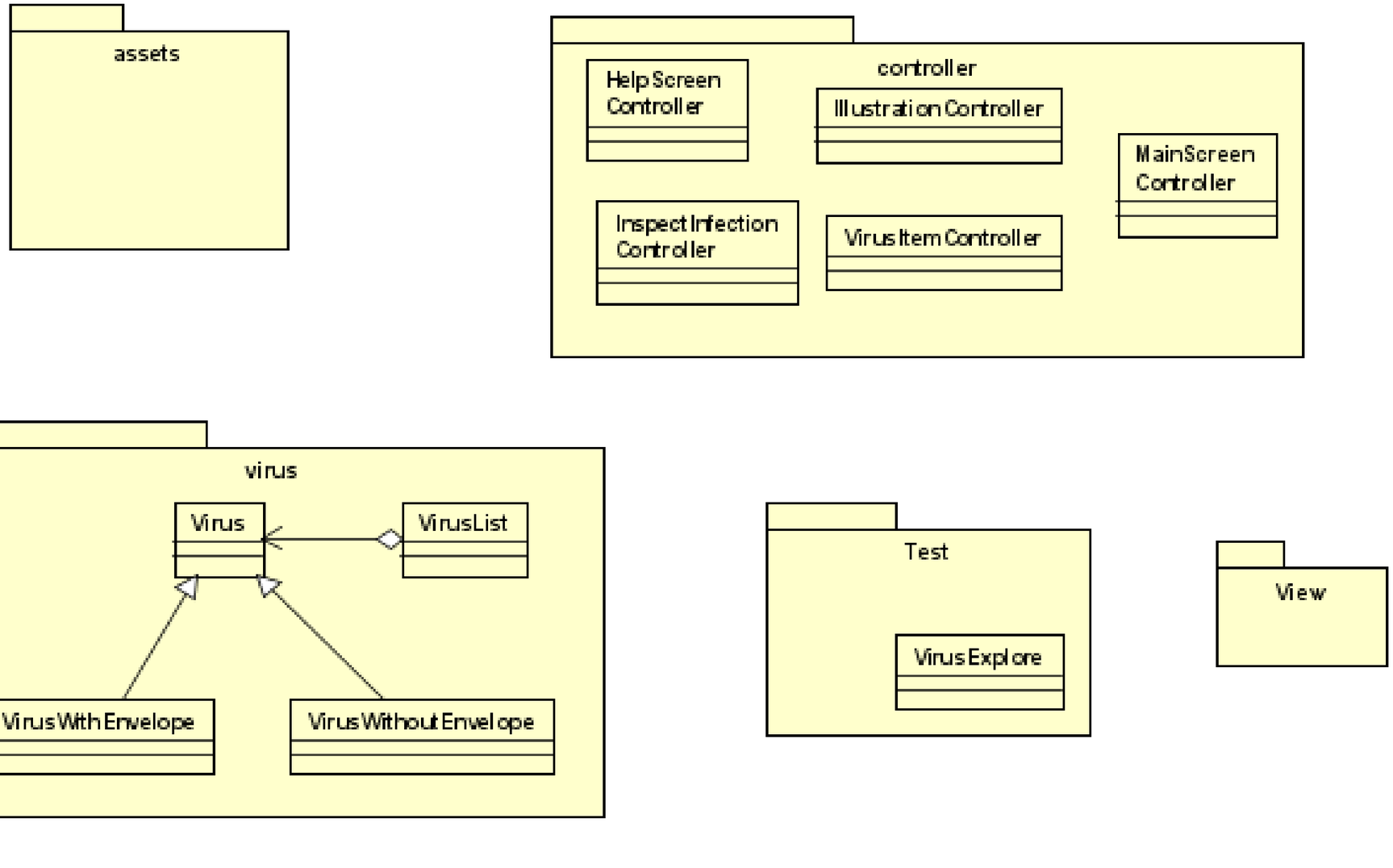
- **Inspect Infection Mechanism: Users can observe the infection mechanism of the virus.**

- **View Application Information: Users can view detailed information about the application.**

General Class Diagram

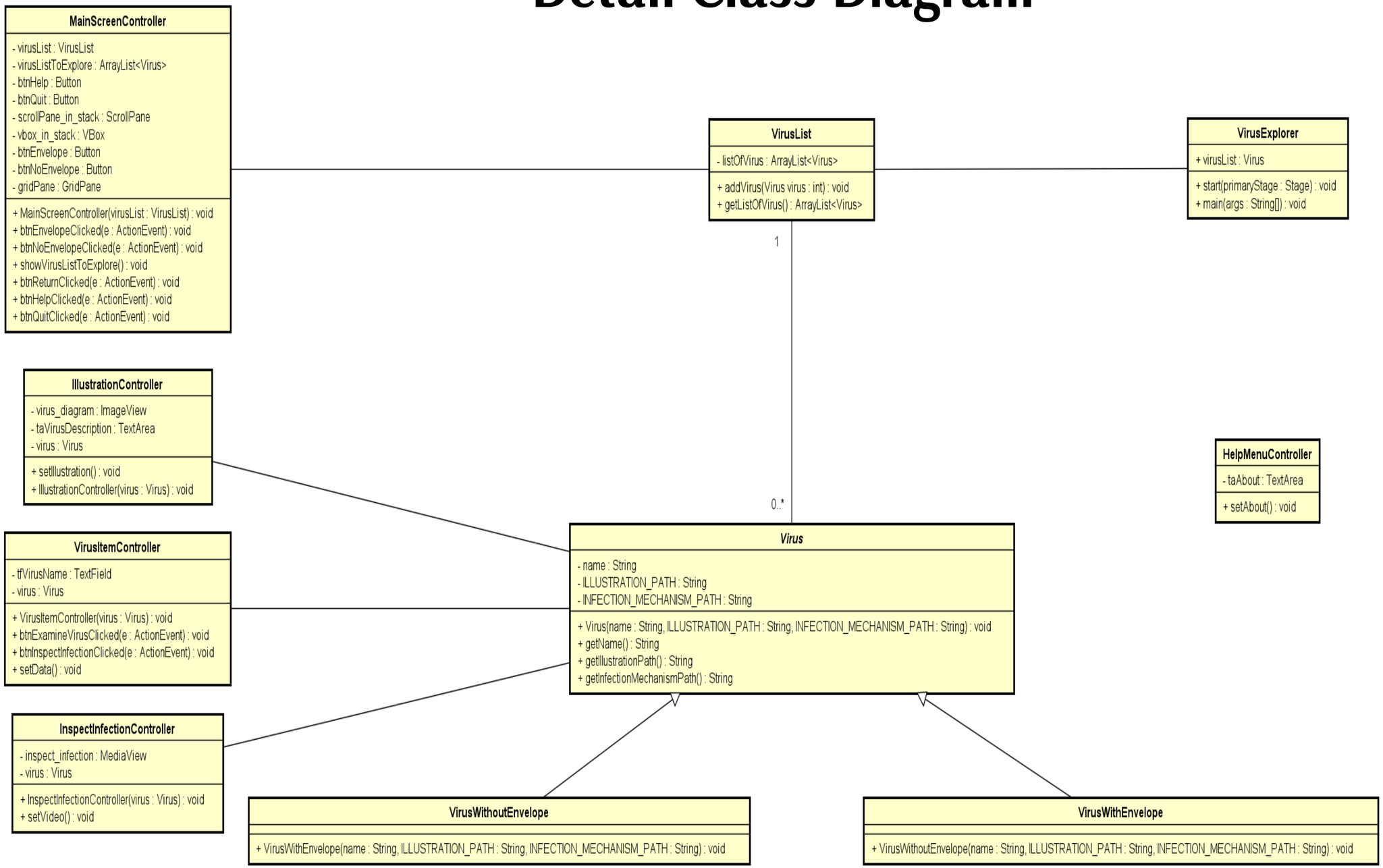


Class Diagram for packages



pkg

Detail Class Diagram



OOP techniques

- **Aggregation**

  Virus is-a-part of VirusList.

- **Inheritance**

  An *abstract* class Virus has two subclasses VirusWithEnvelope, VirusWithoutEnvelope.

- **Encapsulation**

  The internal states of an object are hidden from the outside world.

Link video demo:
https://youtu.be/wnKvfCPuTRA