

# CATASTROPHIC SOFTWARE FAILURES

## Project Team Overview

Created by Coutinho & Bolcau

| Team Leaders   | Git Leader | Git Co-Leader | CSS Leaders           |
|----------------|------------|---------------|-----------------------|
| Bolcau, Çitaku | Wilinski   | Bertolini     | Chatterjee, Brinjevec |

### Transportation

Leader: Skaria

Members: Roscio, Germann Vieira, Brinjevec, Coutinho

### Energy/Infrastructure

Leader: Rissone

Members: Santagostino, Delipetrev, Cocchiara, Shirkani, Chatterjee

### Business-Critical System

Leader: Scapellato

Members: Bertolini, D'arrigo, Calvello, Bianchi, Poopalan

### Healthcare

Leader: Ricetti

Members: Albonico, Spanò, Lazarevic, Wilinski

# Topics Summary

## Transportation

Transport and aerospace are vital to global stability, enabling trade, communication, and mobility across nations. As these sectors increasingly rely on complex software systems, their efficiency and safety depend on technological precision and reliability. A single failure—whether due to technical malfunction or cyberattack—can disrupt supply chains, halt transportation networks, and endanger lives. Ensuring the resilience and security of these systems is therefore essential to protect both economic continuity and human safety worldwide.

## Energy/Infrastructure

Energy and infrastructure systems are the backbone of modern society, running everything from power grids to water treatment plants on complex industrial control software (ICS/SCADA). A single software failure—be it a simple bug or a targeted cyberattack—can trigger catastrophic blackouts, disrupt essential services, and directly threaten national security. Protecting this critical digital infrastructure is therefore essential for societal survival.

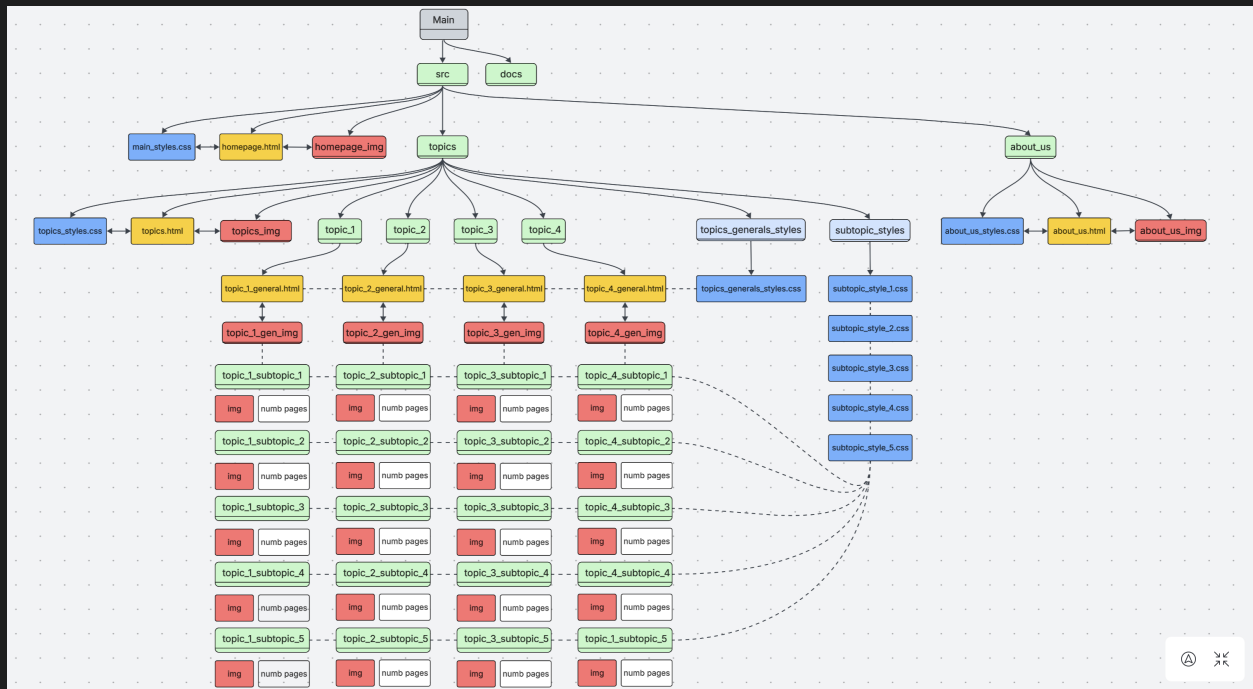
## Business-Critical System

A business-critical system is any application, service, or infrastructure component essential to the core operations of an organization. Failure of such systems can cause major financial loss, disruption, or reputational harm. These systems support key functions like finance, logistics, or customer service and therefore require high availability, reliability, and robust recovery mechanisms.

## Healthcare

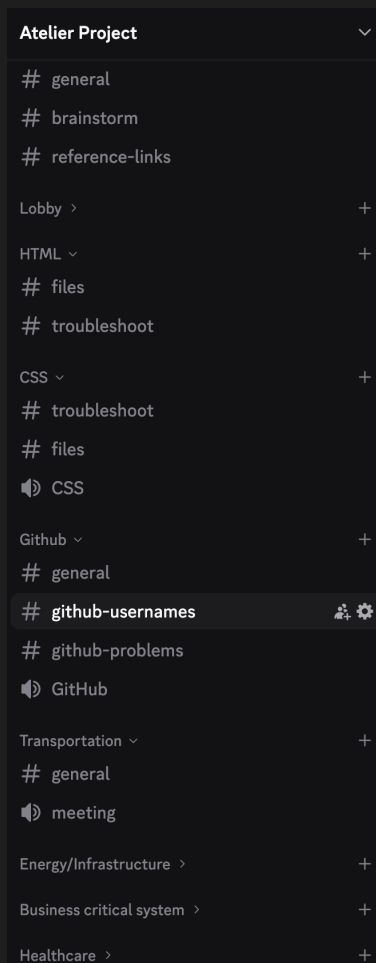
Healthcare technology is critical for patient survival, managing everything from diagnoses and electronic records to life-support devices. As this sector digitizes, software bugs and vulnerabilities are no longer just IT issues; they are direct threats to patient safety. A single failure can lead to misdiagnosis, incorrect treatment, or massive data breaches, making software reliability a life-and-death matter.

# Repository tree
































# Organization

In our organization, the Discord server is essential. As shown in figure, we have a well-defined channel structure (on the left) and a role system (on the right).



**Of course, no project is  
complete  
without *ambitious* deadlines...**

# Project Timeline

| Task Name  | Duration | Start Date   | End Date     | Points | Timeline (Oct 27 - Nov 19, 2025)  |
|--|----------|--------------|--------------|--------|---|
|  Inception  | 1 day    | Tue 28/10/25 | Tue 28/10/25 | -      |      |
|  Go/No-Go   | 1 day    | Wed 29/10/25 | Wed 29/10/25 | 10     |      |
|  Content ready  | 5 days   | Mon 27/10/25 | Fri 31/10/25 | -      |      |
|  CSS done   | 6 days   | Mon 27/10/25 | Mon 03/11/25 | -      |     |
|  CSS finished   | 0 days   | Mon 03/11/25 | Mon 03/11/25 | -      |    |
|  CSS review and finished  | 2 days   | Mon 03/11/25 | Wed 05/11/25 | -      |    |
|  Start making html pages  | 6 days   | Wed 29/10/25 | Wed 05/11/25 | -      |    |
|  Midway Milestone   | 0 days   | Wed 05/11/25 | Wed 05/11/25 | 20     |    |
|  Website done   | 5 days   | Thu 06/11/25 | Wed 12/11/25 | -      |  |
|  Finishing all the pages  | 3 days   | Thu 06/11/25 | Mon 10/11/25 | -      |  |
|  HTML done  | 0 days   | Mon 10/11/25 | Mon 10/11/25 | -      |  |
|  Final Milestone  | 0 days   | Wed 12/11/25 | Wed 12/11/25 | 40     |  |
|  Final Presentation   | 0 days   | Wed 19/11/25 | Wed 19/11/25 | 10     |  |
| <b>Legend:</b>  = Task/Milestone    (black) = Major Milestone    (cyan) = Task Completion   Blue bars = Task duration |          |              |              |        |   |