**MODEL-VIEW-CONTROLLER**

**Group 6**

Leader: **Clairjay Galorpot**

Members :

**Crisandy Gomez**

**Arvin Jay Lazan**

**John Daniel Marañan**

**Krish Elimark Talino  
  
Instructor: Jim Jamero**

Date: **September 27, 2025**

**Questions**

**1. What challenges might a developer face when building a web application without an MVC framework? How does MVC solve these challenges?**

Without a framework, code becomes messy because the database queries, PHP logic, and HTML design often mix in the same file. This makes debugging and adding features harder. MVC solves this by separating the Model (data), View (UI), and Controller (logic). This separation makes projects more stable, easier to maintain, and faster to develop (GeeksforGeeks, 2023; Perficient, 2020).

**2. How does an HTTP request flow through MVC, and what is the role of the Controller?**

1. Browser sends a request.
2. Request goes to index.php (front controller).
3. Router selects the correct controller.
4. Controller receives the request and checks inputs.
5. Controller calls the model to handle data.
6. Model interacts with the database and returns results.
7. Controller applies logic and chooses the correct view.
8. Controller sends data to the view.
9. View generates output, which is sent back to the browser.

The **Controller** is very important because it is the middleman. It keeps the model (data) and view (UI) separate, which makes the code easier to maintain and safer (GeeksforGeeks, n.d.).

**Q3: Based on CodeIgniter’s pros and cons, would you recommend it for a mid-sized project?**

 **Pros:** small footprint, easy to set up, fast, has built-in libraries like form validation and sessions (Jakarta Telkom University, n.d.).

 **Cons:** some old PHP4 code, no built-in ORM, and irregular updates (Mindfire Solutions, 2018).

For a mid-sized project like our Hospital Management System (HMS), we recommend CodeIgniter because it is fast, simple, and easy to learn. For very large projects, Laravel might be better since it has more modern tools (Kinsta, 2022).

**Q4: How does CodeIgniter’s file structure reflect MVC, and what are the benefits of this structure?**

CodeIgniter separates files into **controllers/, models/, views/**, plus helpers and libraries. This matches MVC directly. The benefit is that the team always knows where to place code. It improves maintainability, helps new members onboard quickly, and keeps the project organized

**Q5: Why might some developers in 2017 have chosen CodeIgniter over Laravel, even though Laravel was more popular?**

Laravel had 43.7% market share, while CodeIgniter had 14.9% (Cloudways, 2017). Still, some developers chose CodeIgniter because it was easier to learn, lighter, and worked well on smaller servers. Many teams already had past experience with it, so they stayed with CodeIgniter.

we haven’t used Laravel yet, but we’ve seen many programmers on TikTok and YouTube say Laravel feels easier and more modern than CodeIgniter. For us, since we are still learning and building with CodeIgniter, we like its simplicity and think it is enough for our HMS project.

**References**

* Cloudways. (2017). *Laravel vs CodeIgniter: PHP frameworks comparison*. Cloudways. <https://www.cloudways.com/blog/laravel-vs-codeigniter>
* Jakarta Telkom University. (n.d.). CodeIgniter: Definition, how it works, advantages and disadvantages. Retrieved from <https://jakarta.telkomuniversity.ac.id/en/codeigniter-definition-how-it-works-advantages-and-disadvantages>
* Mindfire Solutions. (2018, March). Pros and Cons of CodeIgniter Framework. Mindfire Solutions. Retrieved from <https://www.mindfiresolutions.com/blog/pros-cons-codeigniter-framework>
* GeeksforGeeks. (2023). *Advantages of using MVC architecture in web applications*. GeeksforGeeks. <https://www.geeksforgeeks.org/advantages-of-using-mvc-architecture-in-web-application>
* Kinsta. (2022). *Laravel vs CodeIgniter: Which is better?*. Kinsta. <https://kinsta.com/blog/laravel-vs-codeigniter>
* Perficient. (2020). *Benefits of MVC framework*. Perficient. <https://blogs.perficient.com/2020/04/06/benefits-of-mvc-framework>
* GeeksforGeeks. (n.d.). Benefit of using MVC. GeeksforGeeks. Retrieved from <https://www.geeksforgeeks.org/software-engineering/benefit-of-using-mvc>
* Informal sources: Comments from programmers on TikTok and YouTube (2025) about Laravel being easier and more modern compared to CodeIgniter.