EA IE

Esports as Accelerator for Social Inclusive Education

LESSON

SYMFONY QUEST: TOURNAMENT BUILDER

AUTHOR

SERGIO ELVIRA PEREZ

CODEARTS SOLUTIONS

SYMFONY QUEST: TOURNAMENT BUILDER

Symfony Quest: Tournament Builder uses an adventure-style progression to teach Symfony through the construction of an esports tournament application. Students unlock quests covering routing, controllers, ORM, CRUD operations, authentication and API integration, building confidence through visible progress and immediate feedback.

Subject and level

Advanced VET web-development learners with PHP and object-oriented programming knowledge. The activity is intended for students who need practical experience with a professional framework and enterprise-style backend structure.

Connection to curriculum

The exercise supports framework-based development, MVC architecture, routing, persistence, authentication, CRUD design and API integration. The esports tournament context gives each technical component a clear purpose inside one coherent application.

Didactic and pedagogic considerations

Quest progression provides scaffolding while preserving a real project goal. Each checkpoint must work before the next quest is unlocked, encouraging incremental development and debugging. Reflection after each stage helps learners connect individual Symfony components to the architecture of the whole system.

Time estimate

3-4 hours

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Group size

15-24 students

Overall introduction to exercise

Students build an esports tournament application through a sequence of quests. The initial project is deliberately minimal, and each level adds a professional backend capability: routes and controllers, database entities, CRUD operations, authentication and finally a small API endpoint.

The exercise is distinct from a generic Symfony build because every task is framed around tournament management. Learners see why each framework feature exists and how different layers cooperate to support teams, matches and authenticated administration.

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Exercise as presented to the students

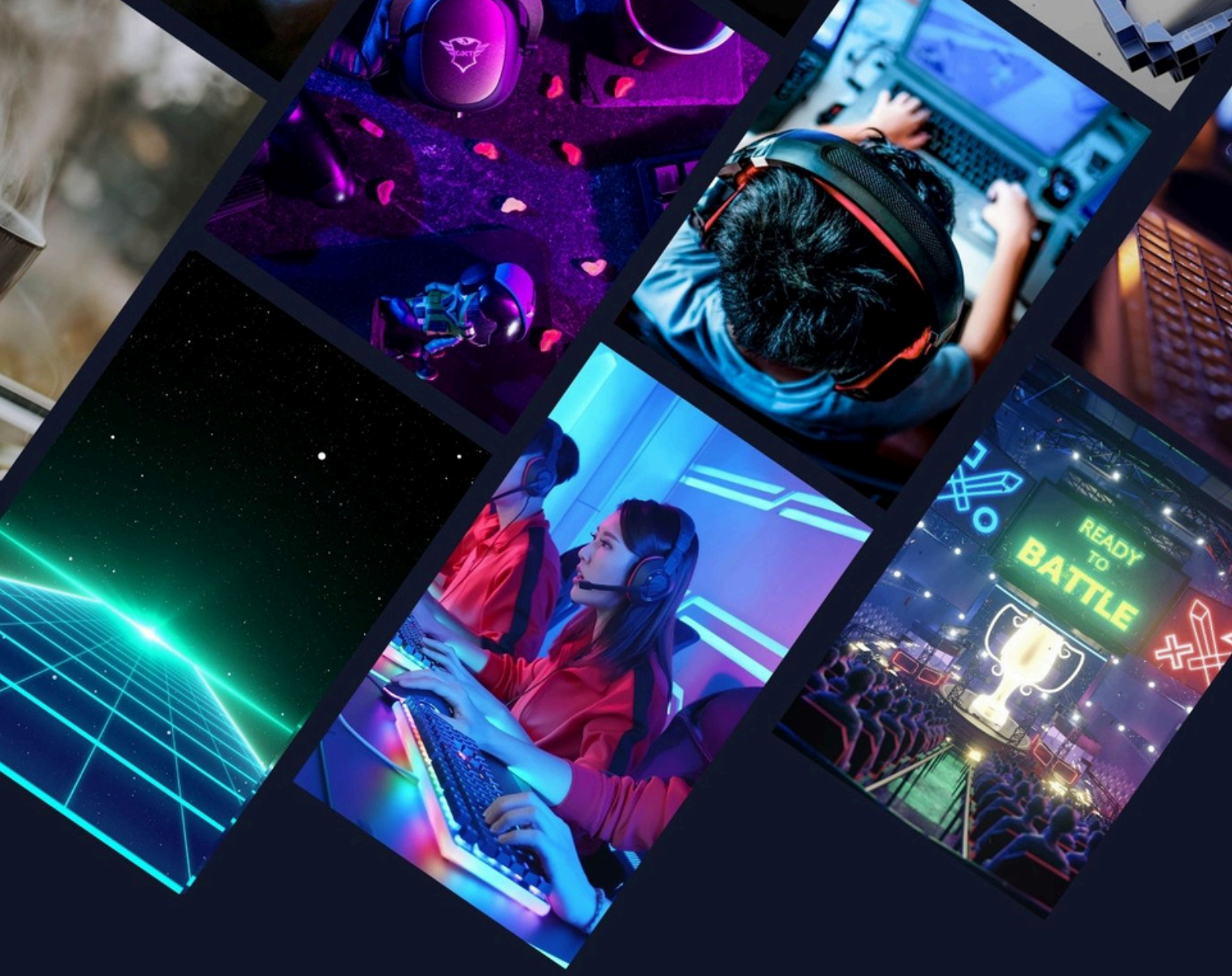
The teacher introduces the class to a fictional esports organiser that needs a tournament-management backend. Students receive a prepared Symfony project, quest cards and a simple data model containing Tournament, Team and Match concepts. The first quest is to configure routes and controllers that display tournament information correctly.

After the routing checkpoint, students unlock the ORM quest. They create or complete Doctrine entities, configure relationships and generate the database migration. A small seed dataset is provided so that learners can verify that the application retrieves real records rather than hard-coded values.

The next quest requires CRUD functionality for teams or tournaments. Students build the necessary forms and validation, then demonstrate create, edit and delete operations to a peer before progressing. Bonus points are available for clear validation messages and sensible separation between controller logic and domain structure.

The authentication quest introduces a protected administration area. Students configure login and restrict management routes so that unauthenticated users cannot modify tournament data. The final optional quest adds a JSON endpoint returning selected match information, linking Symfony backend skills with API-based applications.

At each checkpoint, students record the problem they encountered and the solution they used. The session ends with a short walkthrough of the application and a reflection on how routing, controllers, ORM and security fit together. Assessment considers working functionality, code organisation, debugging independence and the ability to explain architectural decisions.



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