# OpenProject Output for DOST STARBOOKS: Whiz Challenge

Project Documentation Submitted to the Faculty of the School of Computing and Information Technologies

Asia Pacific College

In Partial Fulfillment of the Requirements for Systems Analysis and Detailed Design MSYADD1

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G06 NEXUS - SF 231

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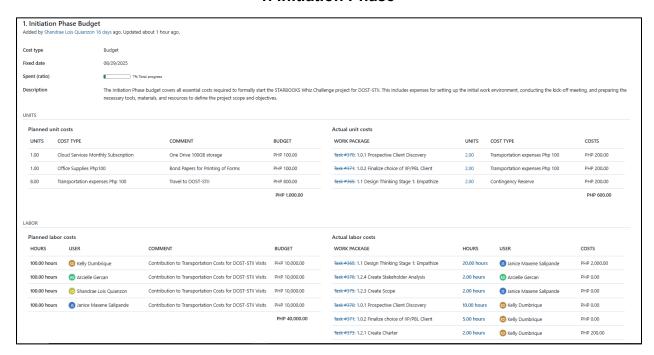
August 2025

1<sup>st</sup> Term

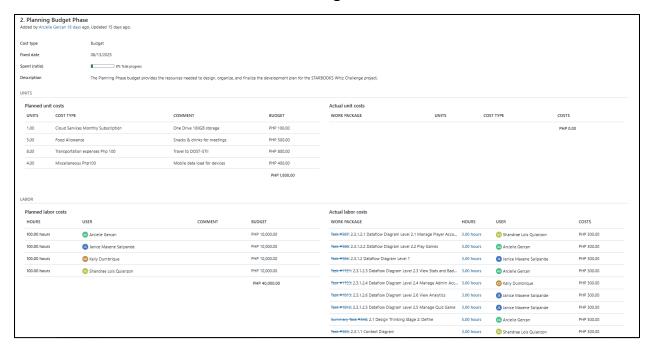
A.Y. 2025 - 2026

#### **INITIAL BUDGETS**

#### 1. Initiation Phase



#### 2. Planning Phase



## **ROADMAP**

# 1 - Planning and Design

|   | 64% Total progress |
|---|--------------------|
| 5 closed (64%) 14 open (36%)  |                    |
| ↑ RELATED WORK PACKAGES   |                    |
| Phase #343: 1.0 Initiation Phase  |                    |
| Phase #344: 2.0 Planning Phase  |                    |
| Phase #345: 3.0 Executing Phase   |                    |
| <del>Task #365</del> : 1.1 Design Thinking Stage 1: Empathize                                     |                    |
| <del>Task #367:</del> 3.1 Design Thinking Stage 4: Prototype                                      |                    |
| <del>Task #368</del> : 3.2 Design Thinking Stage 5: Test  |                    |
| <del>Task #370</del> : 1.0.1 Prospective Client Discovery   |                    |
| Task #371: 1.0.2 Finalize choice of IIP/PBL Client  |                    |
| Task #373: 1.2.1 Create Charter   |                    |
| <del>Task #374</del> : 1.2.2 Create Objectives  |                    |
| Task #375: 1.2.3 Create Scope   |                    |
| <del>Task #376</del> : 1.2.4 Create Stakeholder Analysis  |                    |
| • Task #383: 2.3.1.1 Context Diagram  |                    |
| Task #384: 2.3.1.2 Dataflow Diagram Level 1   |                    |
| <ul> <li>Task #387: 2.3.1.2.1 Dataflow Diagram Level 2.1 Manage Player Account</li> </ul>         |                    |
| <ul> <li>Task #388: 2.3.1.2.2 Dataflow Diagram Level 2.2 Play Games</li> </ul>                    |                    |
| <ul> <li>Task #391: 2.3.2.1.1.1 Test Case for Use Case 2.3.2.1.1</li> </ul>                       |                    |
| <ul> <li>Task #392: 2.3.2.1.1.2 Test Case for Use Case 2.3.2.1.1</li> </ul>                       |                    |
| <ul> <li>Task #393: 2.3.2.1.1.0 Activity Diagram with Swimlanes for Use Case 2.3.2.1.1</li> </ul> |                    |
| <ul> <li>Task #1721: 2.3.1.2.3 Dataflow Diagram Level 2.3 View Stats and Badges</li> </ul>        |                    |
| Task #1723: 2.3.1.2.4 Dataflow Diagram Level 2.4 Manage Admin Account                             |                    |
| <ul> <li>Task #1812: 2.3.1.2.5 Dataflow Diagram Level 2.5 Manage Quiz Game</li> </ul>             |                    |

# 2 – Development

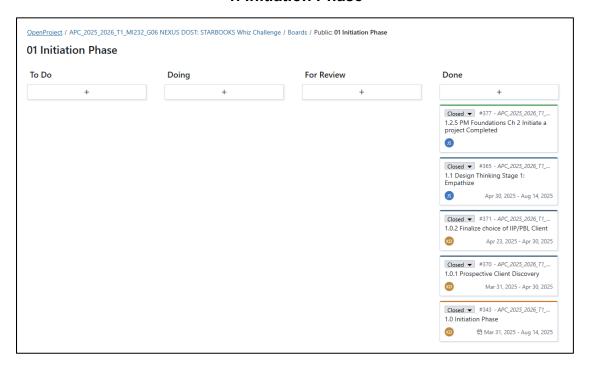
| closed (0%) 57 open (100%)  | 0% Total progress |
|---|-------------------|
| RELATED WORK PACKAGES   |                   |
| VRELATED WORK FACKAGES  |                   |
| Task #386: 3.1.1.1.1 Task 01  |                   |
| Task #1669: 3.4.1.1.1 Implement registration form   |                   |
| Task #1670: 3.4.1.1.2 Implement login system  |                   |
| Task #1671: 3.4.1.1.3 Validate inputs & error handling  |                   |
| <ul> <li>Task #1672: 3.4.1.1.4 Store and retrieve credentials securely</li> </ul>             |                   |
| Task #1674: 3.4.1.2.1 Create profile page layout  |                   |
| <ul> <li>Task #1675: 3.4.1.2.2 Implement profile editing functionality</li> </ul>             |                   |
| <ul> <li>Task #1676: 3.4.1.2.3 Display basic player details</li> </ul>                        |                   |
| Task #1678: 3.4.1.3.1 Develop quiz game logic   |                   |
| <ul> <li>Task #1679: 3.4.1.3.2 Build UI for question and answer display</li> </ul>            |                   |
| Task #1684: 3.4.2.1.1 Develop memory game logic   |                   |
| <ul> <li>Task #1685: 3.4.2.1.2 Design game board and card UI</li> </ul>                       |                   |
| <ul> <li>Task #1687: 3.4.2.2.1 Develop puzzle game logic</li> </ul>                           |                   |
| <ul> <li>Task #1688: 3.4.2.2.2 Create puzzle categories and difficulty levels</li> </ul>      |                   |
| <ul> <li>Task #1690: 3.4.2.3.1 Design badge icons and UI layout</li> </ul>                    |                   |
| Task #1691: 3.4.2.3.2 Implement badge unlocking logic   |                   |
| <ul> <li>Task #1692: 3.4.2.3.3 Update badge display dynamically after achievements</li> </ul> |                   |
| <ul> <li>Task #1695: 3.4.3.1.1 Build lobby system</li> </ul>                                  |                   |
| <ul> <li>Task #1696: 3.4.3.1.2 Implement matchmaking and room creation</li> </ul>             |                   |
| <ul> <li>Task #1697: 3.4.3.1.3 Develop real-time quiz synchronization</li> </ul>              |                   |
| <ul> <li>Task #1698: 3.4.3.1.4 Show results and winner after each match</li> </ul>            |                   |
| Task #1700: 3.4.3.2.1 Implement in-game notifications   |                   |
| <ul> <li>Task #1701: 3.4.3.2.2 Add live updates for scores and progress</li> </ul>            |                   |
| <ul> <li>Task #1702: 3.4.3.2.3 Optimize system for low-latency connections</li> </ul>         |                   |
| <ul> <li>Task #1704: 3.4.3.3.1 Track performance across all game modes</li> </ul>             |                   |
| Task #1705: 3.4.3.3.2 Store and update earned stars   |                   |
| <ul> <li>Task #1706: 3.4.3.3.3 Display overall performance stats in player profile</li> </ul> |                   |
| <ul> <li>Task #1707: 3.4.3.3.4 Integrate stats with badges earned display</li> </ul>          |                   |
| Task #1710: 3.4.4.1.1 Implement player account list and search                                |                   |
| Task #1711: 3.4.4.1.2 Manage admin roles and access levels                                    |                   |
| Task #1713: 3.4.4.2.1 Add/update/delete quiz questions  |                   |
| <ul> <li>Task #1715: 3.4.4.3.1 Integrate AI for auto-generating quiz questions</li> </ul>     |                   |
| <ul> <li>Tack #1716: 3.4.4.3.2 Test and refine All outputs for accuracy.</li> </ul>           |                   |

#### **WORK PACKAGE**

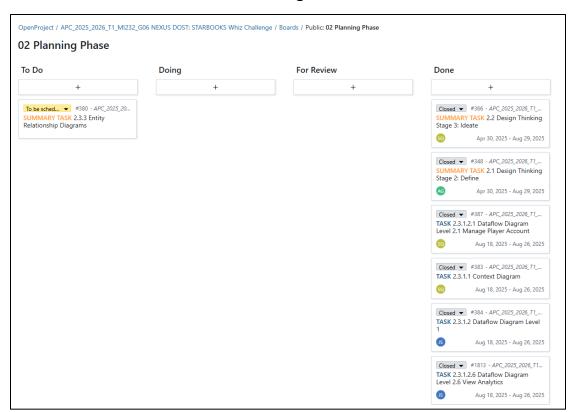


#### **BOARDS**

#### 1. Initiation Phase



#### 2. Planning Phase



## **BACKLOGS**

OpenProject / APC\_2025\_2026\_T1\_MI232\_G06 NEXUS DOST: STARBOOKS Whiz Challenge / **Backlogs** 

#### Backlogs

| ^ 2 | 2 - Dev | relopment  |     | 0 🕶 |
|-----|---------|--|-----|-----|
|     | 350     | Epic: 3.3 Epic 01  | New |     |
|     | 372     | User story: 3.1.1 User Story 01  | New |     |
|     | 382     | Feature: 3.1.1.1 Feature 01  | New |     |
|     | 1666    | Epic: 3.4 Development  | New |     |
|     | 1667    | User story: 3.4.1 Core Player Features                                   | New |     |
|     | 1668    | Feature: 3.4.1.1 Registration & Login                                    | New |     |
|     | 1673    | Feature: 3.4.1.2 Player Profile  | New |     |
|     | 1677    | Feature: 3.4.1.3 Whiz Challenge Game Mode                                | New |     |
|     | 1682    | User story: 3.4.2 Whiz Memory Match, Whiz Puzzle, and Badges Display     | New |     |
| 1   | 1683    | Feature: 3.4.2.1 Whiz Memory Match Game Mode                             | New |     |
|     | 1686    | Feature: 3.4.2.2 Whiz Puzzle Game Mode                                   | New |     |
|     | 1689    | Feature: 3.4.2.3 Badges Earned Display                                   | New |     |
|     | 1693    | User story: 3.4.3 Whiz Battle, Real-Time Features, and Player Statistics | New |     |
|     | 1694    | Feature: 3.4.3.1 Whiz Battle Game Mode                                   | New |     |
|     | 1699    | Feature: 3.4.3.2 Real-Time Features                                      | New |     |
|     | 1703    | Feature: 3.4.3.3 Player Statistics                                       | New |     |
|     | 1708    | User story: 3.4.4 Admin Dashboard  | New |     |
|     | 1709    | Feature: 3.4.4.1 User Management   | New |     |
|     | 1712    | Feature: 3.4.4.2 Content Management                                      | New |     |
| 1   | 1714    | Feature: 3.4.4.3 Al Tools Integration                                    | New |     |
|     | 1717    | Feature: 3.4.4.4 Analytics Dashboard                                     | New |     |