**Project Title:**  
**GameScape: Personalized Video Game Discovery and Journal**

**1. Concept Description**

GameScape is a web application designed to help users discover new video games and manage their personal gaming experiences. By integrating the **RAWG Video Games** Database API, the app provides access to a vast library of games across all major platforms, complete with detailed descriptions, genres, ratings, and images.

**Purpose:**  
The purpose of GameScape is to create a personalized space for gamers to organize and reflect on their gaming journey. Instead of passively browsing, users actively engage with the games they play by tracking their progress, writing reviews, and building a curated collection.

**Functionality:**  
Users can search for and explore games using RAWG's API, then save their favorites to customized lists such as *Currently Playing*, *Completed*, or *Wishlist*. For each saved game, users can add personal notes, rate the game, and write reviews. These features turn GameScape into a digital journal that captures both data and personal experience.

The app also tracks gameplay habits, offering visual stats like total completed games, most played genres, and favorite platforms. Based on saved games and user-generated tags, GameScape generates personalized recommendations to help users discover new titles that match their interests.

**Target Audience:**  
GameScape is built for gamers of all levels—from casual mobile players to hardcore console or PC enthusiasts—who want a central platform to explore, track, and reflect on their video game experiences in a meaningful and organized way.

**2. API Integration Plan**

**External API:**  
[RAWG Video Games Database API](https://rawg.io/apidocs)

**Purpose of the API:**

* To fetch game data like titles, descriptions, genres, platforms, images, and ratings.
* To power game search, discovery, and detail pages.

**Type of Data Retrieved:**

* Game title, genre, release date, developer, cover image, description, and rating.
* Popularity scores and trending lists.

**Integration Approach:**

* Users can search for or browse games from the API.
* Upon selecting a game, details are displayed along with a “Save” option.
* When saved, custom fields (status, tags, notes) are stored in our custom database.

**3. Custom Database Plan**

**Stored Data:**

* **User profiles**: Stores basic user information including username, email, and password hash for secure authentication.
* **Saved games**: Each user can save multiple games from the RAWG API. For each saved game, the app stores the game ID (from the API), along with user-specific data.
* **Custom fields**:
  + **Hours played** (entered manually by the user)
  + **Review text** (user's personal thoughts on the game)
  + **User rating** (a personal 1–10 score)
  + **Game completion status** (e.g., Wishlist, Currently Playing, Completed)
  + **Tags** (e.g., “RPG,” “Co-op,” “Story-rich”) added by the user for personal organization

**Example Relationships:**

* Each **User** can save multiple **Games** to their personal library.
* Each **Saved Game** contains custom data that is unique to that user’s experience.
* Games can be tagged with multiple **Tags**, allowing for user-defined organization and filtering.
* Custom fields are tied to the combination of *user* and *game*, ensuring that the same game can have different data across different users.

**4. User Service Description**

**How GameScape Delivers Value:**

GameScape offers users a centralized and highly customizable platform for managing their gaming life. Rather than passively browsing games, users actively engage by building a personalized library where they can save titles, write notes, assign ratings, and track play status. This transforms the app into a digital gaming journal, offering a unique reflection of each user’s individual journey.

By combining public data from the RAWG API with user-generated content, GameScape creates a seamless blend of rich, external information and personal input. It becomes a powerful tool for both organization and self-expression.

Users also benefit from cross-platform tracking, allowing them to manage their game lists regardless of whether they play on PC, console, or mobile. Personalized statistics and game completion tracking help users visualize their habits and accomplishments.

Most importantly, GameScape enhances game discovery through smart recommendations based on the user’s saved games, favorite genres, and tags. This provides a more meaningful and tailored browsing experience than traditional game databases.

In short, GameScape helps users organize, reflect, and discover—making their gaming journey more interactive and enjoyable.

**5. Team Collaboration Plan**

**Team Roles:**

* **Frontend Developer (Bowen Zhu):** Game search UI, detail pages, dashboard.
* **Backend Developer (Jie Li):** API integration, user/game data management.
* **Database Engineer (Xiyuan Zhang):** Schema design, relationships, authentication.
* **Team Lead & QA (Xinchen Luo):** Weekly check-ins, testing, Trello updates.

**Communication:**

* Wechat for daily messaging.
* Weekly Zoom calls.
* Trello for sprint planning and task distribution.

**Tools:**

* GitHub (version control)
* Trello (task management)
* Figma (UI mockups)
* Google Docs (shared documents)

**6. Development Timeline**

| **Date Range** | **Milestone** | **Task** | **Assigned To** |
| --- | --- | --- | --- |
| Week 3-6 | Project Planning | API research, concept finalization | All |
| Week 7 | Backend Setup | API integration test, database schema | Jie Li |
| Week 8 | Frontend Design | UI mockups, search & detail page | Bowen Zhu |
| Week 9 | Core Features | Game save functionality, custom fields | Xinchen Luo |
| Week 10 | Profile & Dashboard | User dashboard, data visualization | Xiyuan Zhang |
| Week 11 | Final Testing & Polish | QA, bug fixes, UI enhancements | Xinchen Luo |
| Week 12 | Submission | Final report and demo submission | All |