[PROJECT NAME]

Managing Product Development

Product Manager: [YOUR NAME]

Quick Review of the Project Scenarios

You'll need your PRD and prototype from Udacity's *Product Design* course to complete this project.

Linkedin	LinkedIn plans to launch a personalized career growth platform that helps professionals identify skill gaps and recommend courses, certifications, and networking opportunities to advance in their careers. The platform will analyze users' profiles, career goals, and industry trends to offer tailored career development plans, while also enabling companies to find and connect with potential candidates based on emerging skills.
Morgan Stanley	**Morgan Stanley wants to launch a new feature in their Wealth Management app that automates investment portfolio management for individual investors. The app will assess market trends, personal risk preferences, and financial goals to provide personalized investment strategies.**
Hilton	Hilton is developing a virtual concierge feature within its existing mobile app Hilton Honors, allowing guests to request room service, book spa treatments and activities, make dining reservations, and get personalized recommendations for local attractions. The goal is to make the guest experience seamless and increase revenue from concierge services.

Starter PRD and Prototype

REFERENCE
REMOVE BEFORE SUBMITTING

If you completed Udacity's ***Product Design*** course, you can use the PRD and Prototype you created for that project as the starter for this project.

Otherwise, use these

Starter PRD

Prototype

Note: This is not a complete PRD. It only includes the relevant section for this project, which is feature requirements.

Test Plan

Create a test plan to validate everything is built to spec and working correctly

Test Cases: Functional Requirements

Feature	Steps	Expected Behavior	Priority
Automated Portfolio Management	1. User enters risk profile and financial goals. 2. App generates personalized portfolio recommendations.	App recommends a diversified portfolio aligned with the user's risk tolerance and financial goals.	High
Goal-Based Investing	1. User sets a financial goal (e.g., retirement). 2. App recommends investment strategies and projects progress.	App provides clear and actionable recommendations to help the user achieve their goal.	High
Personalized Insights	1. User views their portfolio dashboard.	App displays key performance metrics, risk levels, and potential opportunities in a clear and concise manner.	High
Seamless Integration	1. User navigates between the automated investing feature and other app sections.	Feature is seamlessly integrated into the existing app, providing a smooth and intuitive user experience.	High
Account Creation	1. User initiates account creation. 2. User enters personal information and completes verification steps.	Account is successfully created, and user can access the automated investing feature.	High
Investment Deposit	1. User initiates a deposit into their investment account. 2. User enters deposit amount and confirms transaction.	Deposit is successfully processed, and funds are reflected in the user's account balance.	High
Portfolio Rebalancing	1. User's portfolio drifts from the target asset allocation. 2. App automatically rebalances the portfolio.	Portfolio is rebalanced to align with the user's risk tolerance and financial goals.	Medium
Tax-Loss Harvesting	1. App identifies potential tax-loss harvesting opportunities. 2. User approves the tax-loss harvesting transactions.	App automatically executes trades to realize losses and offset capital gains, potentially reducing tax liability.	Medium

Test Cases: Non-functional Requirements

Requirement	Steps to reproduce	Priority
Performance	User performs various actions within the feature (e.g., generating recommendations, viewing portfolio).	App responds quickly and smoothly, with minimal loading times (e.g., less than 200ms for most actions).
Security	User accesses sensitive information (e.g., account details, transaction history).	App employs robust security measures (e.g., encryption, multi-factor authentication) to protect user data.
Usability	User interacts with the feature's interface and navigation.	App is intuitive and easy to use, with clear instructions and helpful guidance.
Accessibility	Users with different abilities (e.g., visual impairments) access the feature.	App adheres to accessibility guidelines (e.g., WCAG) to ensure inclusivity for all users.
Compatibility	User accesses the feature on different devices and operating systems (e.g., iOS, Android, web).	App functions correctly and consistently across all supported platforms and devices.
Reliability	User uses the feature continuously over an extended period.	App remains stable and functional, with minimal downtime or errors.

Dogfood Survey

Create a dogfood survey to get insight from real world usage

Dogfood Survey 1/2

Overall Experience:

1. How satisfied are you with the overall experience of using the automated investing feature? (Rating scale)
2. What did you like most about the feature? (Open-ended)
3. What did you like least about the feature? (Open-ended)
4. How likely are you to recommend this feature to a friend or colleague? (NPS question)
5. Did you encounter any bugs or issues while using the feature? (Yes/No)

Personalized Portfolio Management:

1. How satisfied are you with the personalized portfolio recommendations? (Rating scale)
2. Do you feel the recommendations are aligned with your risk tolerance and financial goals? (Yes/No)
3. What, if anything, could be improved about the portfolio recommendations? (Open-ended)

Goal-Based Investing:

1. Have you used the goal-based investing feature? (Yes/No)
2. If yes, how satisfied are you with the goal-setting process and progress tracking? (Rating scale)
3. What, if anything, could be improved about the goal-based investing feature? (Open-ended)

Dogfood Survey 2/2

Personalized Insights:

1. How helpful are the personalized insights provided by the feature? (Rating scale)
2. Do you feel the insights are clear, concise, and relevant to your investment portfolio? (Yes/No)
3. What, if anything, could be improved about the personalized insights? (Open-ended)

Seamless Integration:

1. How seamlessly integrated do you find the automated investing feature with the rest of the Wealth Management app? (Rating scale)
2. Did you encounter any issues or difficulties navigating between the feature and other app sections? (Yes/No)

Prioritize

Issues come up. Keep the team focused on the things that matter the most

Fire Drills

Scenario	Who	Communication Method	Key Messages
QA finished testing and reported that 3 test cases failed	QA Lead, Engineering Lead	Meeting	- Review failed test cases. - Determine root cause and severity. - Prioritize fixes based on impact and launch timeline.
An engineer is ready to start working on the next feature, but doesn't have the mocks for it	UX Designer, Engineer	Ping	- Request mockups for the next feature. - Provide context on the feature's priority and timeline. - Offer assistance if needed.
Support flagged that many users are unable to sign in to their accounts	Support Lead, Engineering Lead	Meeting	- Discuss the sign-in issue and its impact on users. - Investigate potential causes and solutions. - Determine a mitigation plan and communicate it to affected users.
Dogfood survey results are in and dogfooders are not excited about recommending the product	Dogfood Participants, Product Team	Email	- Summarize key findings from the dogfood survey. - Highlight areas of concern and potential improvements. - Encourage further feedback and suggestions.
Legal informed you about a new law going into effect that will require you to add new privacy controls before you can launch	Legal Team, Engineering Team	Meeting	- Discuss the new privacy law and its implications for the product. - Determine the necessary changes and development effort. - Assess the impact on the launch timeline and develop a mitigation plan.
A new PM just joined your team and is interested in learning about your work	New PM	Doc	- Share relevant documents (e.g., PRD, roadmap, presentations). - Offer to schedule a meeting for a more detailed overview and Q&A. - Welcome the new PM and express your willingness to collaborate.

Prioritize

Scenario	Priority Ranked	Rationale
QA finished testing and reported that 3 test cases failed	2	Failed test cases indicate potential bugs that need to be addressed before launch to ensure a smooth user experience.
An engineer is ready to start working on the next feature, but doesn't have the mocks for it	5	This is important for the engineer's productivity, but it can be addressed after more critical issues are resolved.
Support flagged that many users are unable to sign in to their accounts	1	This is a critical issue that prevents users from accessing the app and needs immediate attention to avoid user frustration and potential churn.
Dogfood survey results are in and dogfooders are not excited about recommending the product	4	While not critical for the immediate launch, negative dogfood feedback needs to be analyzed and addressed to improve user satisfaction and product success.
Legal informed you about a new law going into effect that will require you to add new privacy controls before you can launch	3	Legal compliance is essential, and this needs to be addressed promptly to avoid delays or legal issues. It could potentially block the launch if not addressed.
A new PM just joined your team and is interested in learning about your work	6	Welcoming the new PM and providing context is important for team cohesion and knowledge sharing, but it can be scheduled after addressing more urgent matters.

Go No Go

Run a go / no go meeting to decide if the product is ready to launch, and communicate out any risks and mitigations in place

[Product Name] AutoPilot

AutoPilot is an automated investing feature within the Morgan Stanley Wealth Management app that makes investing effortless and accessible for everyone. It takes the guesswork out of building and managing a portfolio, allowing users to set their financial goals and let the app do the rest. With personalized recommendations, diverse investment options, and educational resources, AutoPilot empowers users to navigate the complexities of investing with confidence and ease.

Key Features:

- Automated Portfolio Management
- Goal-Based Investing
- Personalized Insights
- Seamless Integration
- Account Creation
- Investment Deposit
- Portfolio Rebalancing
- Tax-Loss Harvesting

[Feature 1] **Automated Portfolio Management**

GREEN

Intelligently assesses risk tolerance, financial goals, and market trends to provide personalized investment recommendations.

Testing:

- All test cases passed, demonstrating accurate risk assessment and personalized portfolio recommendations.

Dogfood:

- Positive feedback from users, with high satisfaction rates for the ease of use and relevance of recommendations.

Production Readiness:

- Monitoring user adoption, engagement metrics (time spent in the feature, frequency of portfolio reviews), and AUM growth.

Open Issues / Risk:

- Potential for algorithm bias in portfolio recommendations.

Mitigations:

- Continuous monitoring and refinement of the AI/ML models, incorporating user feedback and diverse data sets to minimize bias. Weekly reporting and close monitoring of escalations of inprecissions.

[Feature 2] **Goal-Based Investing**

YELLOW

Testing:

- One test case failed related to goal progress tracking, indicating a potential bug.

Dogfood:

- Some users reported confusion about setting and tracking goals, suggesting usability improvements are needed.

Production Readiness:

- Monitoring user adoption of the goal-based investing feature and gathering feedback on the user experience.

Open Issues / Risk:

- Potential usability issues and a bug in goal progress tracking.

Mitigations:

- Prioritize fixing the bug and conduct further user testing to identify and address usability issues.

[Feature 3] **Personalized Insights**

YELLOW

Testing:

- All test cases passed, indicating that the underlying functionality for generating and displaying insights is working correctly.

Dogfood:
While some dogfooders praised the clarity and relevance of the insights, a significant portion (around 30%) reported issues. These issues include:

- **Inconsistent data:** Some users reported seeing outdated or inaccurate information in their insights.
- **Irrelevant recommendations:** A subset of users felt that the insights provided were not relevant to their specific financial goals or investment preferences.
- **Lack of clarity:** A few users found some of the terminology or presentation of the insights confusing or difficult to understand.

Production Readiness:

- **Monitoring:** Closely monitor user engagement with the personalized insights feature, tracking the frequency of viewing insights, time spent on insights, and click-through rates.
- **Feedback Channels:** Gather user feedback through in-app surveys, feedback forms, and app store reviews to identify any recurring issues or areas for improvement.

Open Issues / Risk:

- **Data accuracy and consistency:** The reports of inconsistent data suggest potential issues with data feeds or data processing that need to be addressed.
- **Relevance of insights:** The feedback on irrelevant recommendations indicates a need to refine the personalization algorithms and ensure alignment with user goals and preferences.
- **Clarity and usability:** The confusion reported by some users highlights the importance of clear communication and user-friendly presentation of insights.

Mitigations:

- **Data validation:** Implement stricter data validation checks and investigate the root cause of data inconsistencies reported.
- **Personalization refinement:** Analyze user data and feedback to refine the personalization algorithms and improve the relevance of insights.
- **Usability improvements:** Conduct A/B testing with different presentations of insights to identify the most clear and user-friendly approach.
- **Educational resources:** Provide additional educational resources or tooltips within the app to explain key concepts and terminology related to the insights.

Recommendation: [**Delay** Launch]

While the personalized insights feature has shown promise, is functioning as expected and positive feedback from dogfooding, the issues raised during dogfooding need to be addressed to ensure a positive user experience. By closely monitoring user engagement, gathering feedback, and implementing the proposed mitigations, we can improve the accuracy, relevance, and clarity of the insights and maximize their value to users.

Invitation: Go / No Go Launch Meeting

To:

- Product Team (PM, UX Designer, Engineers, QA)
- Engineering Lead
- UX Lead
- QA Lead
- (Optional) Representatives from Marketing and Customer Support

Subject: AutoPilot Progress Update and Next Steps

Message:

Dear all,

This is an invitation to a meeting to discuss the progress of the AutoPilot automated investing feature. As you know, we've decided to delay the launch to address some issues identified during testing and dogfooding.

In this meeting, we'll review the following:

- Progress update on bug fixes and usability improvements.
- Revised launch timeline and milestones.
- Plan for addressing open issues and risks.
- Next steps for development and testing.

Please come prepared to discuss the open issues and contribute to the plan for the next month.

Thanks,

Responding to Feedback

Your director:

This all looks really promising! Can we launch two weeks earlier than originally planned?

Your response:

- I **appreciate your enthusiasm** and the desire to launch sooner!
- However, based on the feedback from testing and dogfooding, we've decided to delay the launch by a month to address some critical issues.
- We want to ensure a smooth and positive user experience, and rushing the launch could compromise that.
- We're confident that this delay will allow us to deliver a more polished and valuable product.
- In the meantime, we'll continue to provide regular **weekly updates on our progress and address any open issues**.
- We're committed to launching a successful product that meets the needs of our users and delivers on our business objectives.