Project Charter

for

Alexa study aid skill

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1. **Project Description**

An Alexa Study Aid skill is a voice-enabled application that runs on Amazon's Alexa platform and is designed to assist students in their studies. The skill can be activated by voice commands, such as "Alexa, open Study Aid" and can provide features such as flashcard quizzes, summaries of key concepts, and study schedules. Additionally, the skill may allow users to set reminders for upcoming exams or assignments and can provide resources such as links to educational websites or videos. The goal of the skill is to make studying more efficient and interactive for students.

1. **Business Objectives and Success Criteria**

A business objective for an Alexa study aid skill could be:

* To provide a convenient and effective study tool for students to improve their academic performance.
* Success criteria for the study aid skill could include:

1. User engagement, such as the number of active users and frequency of use
2. User satisfaction, as measured by ratings and feedback
3. Improved academic performance of users, as measured by grades or test scores
4. Increased sales and revenue
5. Positive word-of-mouth and referral marketing
6. Integration with educational institutions and curriculum.
7. **Stakeholders**

There are several stakeholders that may be involved in our Alexa Study aid skill project, including:

* Amazon (developer and provider of Alexa technology)
* The developers of the skill, who are responsible for creating and maintaining the skill
* Competitor companies in the education and technology industries.
* The students who will use the skill to aid their studies
* Investors or funding sources, who may provide financial support for the project in exchange for a return on their investment.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Stakeholder*** | ***Major Benefits*** | ***Attitudes*** | ***Win Conditions*** | ***Constraints*** |
| Project Sponsor | Provides funding and owns the project | Supporter | Return on Investment | Cost |
| Project Manager | Involved in planning and monitoring the project | Champion | Scope and schedule | Time , Scope and Resources |
| Amazon | Provides the dashboard for wide range of skill creation | Neutral | Quality | Resources |
| Competitors | market nearby share | Opponent | Quality |  |
| Developers | Perks and certification provided by Amazon | Supporter | Quality | Time |
|  |  |  |  |  |

1. **Vision**

Empowering students to achieve academic excellence through personalized, hands-free study assistance with Alexa.

1. **Project Scope**

During the research part we came to know that Amazon Alexa is having a great demand over Google home and Apple’s Home Pod and more of the new customers also prefer Alexa or Amazon’s Echo dot.

This Alexa skill which is helping students with their studies and maintaining its efficiency will be all new in our assistant which is also not available in any assistant previously this will eventually increase the popularity our product

1. Improved memory retention: Study aids can help students better retain information by breaking down complex concepts into manageable chunks.
2. Increased focus and concentration: Study aids can help students stay focused and on task, reducing distractions and increasing productivity.
3. Better organization: Study aids can help students organize their study materials and schedule, making it easier to stay on top of assignments and deadlines.
4. Greater understanding: Study aids can provide a deeper understanding of the material by breaking down complex concepts and providing additional resources such as  interactive quizzes.
5. Flexibility: Study aids can be accessed anytime, anywhere, which allows students to study at their own pace and on their own schedule.
6. **Assumptions and Dependencies**

When using the study aid skill on a device like Alexa, there are a few assumptions that may be made:

1. The user has access to an Alexa-enabled device such as an Amazon Echo or Echo Dot.
2. The user has an internet connection in order to access the skill and any related information.
3. The user is able to understand and interact with the skill using voice commands in English.
4. The user has a basic understanding of how to use Alexa and its capabilities.
5. The user has the necessary study materials, such as textbooks or notes, in order to effectively use the skill.
6. The study aid skill is designed and programmed to be helpful, accurate and up-to-date.

In order to use an Alexa study aid skill, you will need the following dependencies:

1. A device with Alexa, such as an Amazon Echo or Echo Dot.
2. An Amazon account to download the skill from the Alexa Skill Store.
3. A reliable internet connection to enable the skill and access its features.
4. **Constraints**

Design constraints for an Alexa study aid skill could include the need for the skill to be user-friendly and easy to navigate, as well as providing valuable and relevant information for students. The skill should also be able to handle a wide range of topics and subject areas.

Right now, our design is also not able to provide personalized information to the users or even get personalized according to their provided credentials or requirements.

Implementation constraints for the skill may include the need to integrate with existing educational systems and databases, such as online textbooks or learning management systems, to provide accurate and up-to-date information. Additionally, the skill may need to comply with privacy and security regulations to protect the personal information of users.

Another constraint might be on the natural language understanding (NLU) and natural language generation (NLG) abilities of the model. The skill should be able to understand the user’s intent and provide appropriate responses, and it should also be able to generate responses that are clear and easy for users to understand.

1. **Milestones**

|  |  |  |
| --- | --- | --- |
| ***Event or Deliverable*** | ***Target Date*** | ***Responsibility*** |
| Project charter approved | 18/1/23 | Rishabh, Harshit & Siddhartha |
| Project plan completed | 19/1/23 | Harshit & Siddhartha |
| Project plan approved | 19/1/23 | Rishabh & Siddhartha |
| Project team assembled | 20/1/23 | Rishabh, Harshit |
| Project execution initiated | 21/1/23 | Rishabh, Harshit |
| Project execution completed | to be completed |  |
| Customer acceptance |  |  |
| Project closed out |  |  |

1. **Business Risks**

There are several potential business risks for an Alexa study aid skill, including:

1. Competition: There may be other study aid skills available on the Alexa platform, which could make it difficult to attract and retain users.
2. Limited user base: The skill may only appeal to a specific demographic (e.g., students), which could limit its potential user base.
3. Reliance on third-party data: The skill may rely on external sources of information (e.g., study materials or online sources for conducting the quiz), which could make it difficult to maintain the accuracy and relevance of the information provided.
4. Privacy concerns: Users may be hesitant to share personal information (e.g., course schedules, grades) with the skill due to privacy concerns.
5. Technical issues: The skill might face some technical issues as it works depending upon the quality of the network which can prevent it from functioning properly, which could lead to negative reviews and decreased user engagement.

1. **Resources**

For the user to use an Alexa study aid skill, they'll need the following resources:

1. An Alexa enabled device, such as an Amazon Echo or Echo Dot.
2. A valid Amazon account.
3. An internet connection to use the device and access the skill.
4. The Alexa app installed on a smartphone, tablet, or computer.
5. A compatible device and internet browser to enable voice commands or use the Alexa app.

To create an Alexa study aid skill, you'll need the following resources:

1. Amazon Developer
2. Account Alexa Skills Kit (SDK)
3. A web server for hosting your skill's backend code
4. A database for storing user data (if required)
5. A development environment, such as Visual Studio Code
6. Familiarity with programming languages such as Node.js or Python.
7. Knowledge of Alexa Skills Kit (ASK) and its APIs. and that is also mentioned in the basic structure of the program