# Cloud Computing Workshop with AWS

## Project Proposal Document

### Project Information

Project Name: Home Harmony  
  
  
Student Names: Moran Pol, Ofir Koren, Adi Cohen  
Project Track: Applied/Entrepreneurial

### 1. Background

### Home Harmony is a solution designed to make life easier for people sharing living spaces. There's a growing need for a tool that can help with communication, organization, and building a sense of community. Home Harmony does just that. It's a platform that not only helps with day-to-day tasks but also aims to create a strong bond among roommates. Our goal is to go beyond just managing chores and expenses, we want to make shared living enjoyable and organized for everyone involved.

### 2. Problem Statement

### Living with roommates involves more than just splitting chores. It means coordinating events, managing important documents, and keeping track of shared expenses. Existing solutions often address these issues separately, leading to a poor living situation. Home Harmony fills this gap by bringing everything together in one place. Our platform makes it easy to assign chores, plan events, organize documents, and track expenses—all in a single, user-friendly interface. Our goal is to make shared living as easy and enjoyable as possible, so roommates can focus on building a harmonious home together.

### 3. Proposed Solution

### Home Harmony is a new web application for roommates with features like Chores Roulette, Event Planning, Document Repository, and Expense Tracking, it covers all the bases.

### Chores Roulette ensures everyone gets fairly distributed household tasks. Event Planning takes the stress out of organizing group activities, like movie nights or cleaning sessions. The Document Repository keeps important papers like bills and maintenance records in one accessible place. And Expense Tracking gives you a clear picture of shared costs, helping everyone stay on budget.

### 4. Alternative Approaches & Market Research

### After research we found these existing apps in the market: Splitwise:

### Focus: Expense Tracking and Splitting Bills

### Example Usage: Ideal for keeping tabs on shared expenses and dividing bills among roommates.

### Cozi:

### Focus: Shared Calendar and Family Organizer

### Example Usage: Useful for coordinating schedules, appointments, and organizing shared events among roommates.

### Trello:

### Focus: Task and Project Management

### Example Usage: Handy for managing shared to-do lists, chores, and collaborative projects within the household.

### Notion:

### Focus: Note-Taking and Collaboration

### Example Usage: Great for maintaining shared notes, to-do lists, and collaborative documents among roommates.

### While these apps excel in their fields, there isn't a single app that combines all these features for a solution made specifically for roommates. Home Harmony aims to fill this gap by combining the strengths of these individual apps and more, providing one platform for an easy and enjoyable shared living experience.

### 5. Innovation

Home Harmony stands out because it combines lots of helpful features in one place. It makes assigning chores, planning events, storing documents, and tracking expenses super easy. Unlike other apps that focus on just one thing, Home Harmony covers all the bases. It's not just about fixing individual problems—it's about creating a smoother and more organized way of living together.

### 6. Target Audience

### The target audience for Home Harmony includes individuals living in shared accommodations, such as college students sharing a dorm, young professionals in a shared apartment, or even families. Essentially, it is relevant to anyone who shares living space with others and seeks a more organized and harmonious living experience.

### 7. Features and User Flow

* Chores Roulette:  
  Home Harmony introduces Chores Roulette, a dynamic feature that ensures a fair distribution of household tasks among roommates. Users engage in a gamified system where completed chores earn them points, promoting a sense of accomplishment and accountability within the living space.
* Event Planning and Notifications:  
  Simplifying the coordination of household events, the Event Planning and Notifications feature allows roommates to plan activities effortlessly. The system sends automatic reminders, communication and ensures everyone is on the same page for shared experiences like movie nights, parties, or cleaning schedules.
* Document Repository and Contact Hub:  
  Collect essential information, Home Harmony provides a Document Repository and Contact Hub. This feature offers a secure space for storing crucial household documents, such as bills and maintenance records. Additionally, it acts as a centralized directory for important contacts, ensuring easy access for all roommates.
* Virtual Bulletin Board and Home Inventory Management:  
  The Virtual Bulletin Board and Home Inventory Management feature creates a dynamic space for roommates. Users can post messages, announcements, or fun notes on the virtual bulletin board, creating a sense of community. Simultaneously, the Home Inventory Management system allows for efficient tracking of household items, minimizing unnecessary purchases and promoting responsible resource usage.
* Expense Tracking and Shared Purchases:  
  Home Harmony excels in enabling transparent financial management among roommates with the Expense Tracking and Shared Purchases feature. Users can log individual purchases for the household, and the app calculates and displays the amount owed by each roommate. This functionality minimizes misunderstandings, promotes fair distribution of costs, and ensures a clear overview of shared expenses, fostering financial transparency and harmony within the living arrangement.

### 8. External Dependencies

### The application will utilize AWS cloud services for data storage, enable push notifications and more.

### 9. Deliverables

### By project completion, we aim to deliver a fully functional web application featuring a user-friendly interface, and implement features such as Chores Roulette, Event Planning, Document Repository, Virtual Bulletin Board, and Expense Tracking. The web application will be available online for users to access the user-friendly features. Users can effectively manage their households with ease.

### Submission Details

GitHub Link:  
https://github.com/moranpol/Home-Harmony.git  
  
Workshop Website Registration Link:  
[Provide the link to the project registration on the workshop website]

### Additional Notes

[Use this space for any additional notes or information relevant to your project proposal]