

Software Engineering Internship Assignment

About Mitt Arv

Mitt Arv, which translates to ‘**My Legacy**’ in Swedish, is an innovative legacy-tech startup on a mission to transform the way we approach end-of-life planning. Our primary goal is to empower individuals to proactively plan for the future, encompassing not only the practical aspects like listing and sharing assets but also the critical dimension of emotional well-being. We’re on a journey to challenge and eliminate the existing stigma surrounding conversations about death.

Our Vision

Mitt Arv envisions a future where no one is left in financial or emotional chaos on the passing away of a loved one.

Our Genesis

The testing COVID times saw unexpected losses for almost everyone on this planet. We realised how fragile life is! Our founder, Vishal, had to rush back to India from Singapore during the delta wave due to the COVID-19 hospitalisation of his mother. At the same time, Vishal’s B-School batchmate passed away, leaving behind a 2-year-old daughter, and Vishal, having a son who was just 6 months old then, had a tremble down his spine. But Vishal is not alone. Many such stories move the toughest into a flurry of emotion. These tough times are what led to the birth of “Mitt Arv” and saw the inception of the products – Emotional Will, Asset Vault, Doc Keep, and Time Capsule.

Our Hiring Philosophy

At Mitt Arv, we believe in nurturing talent from its budding stages, recognizing the potential that lies within each individual. Hence, at entry level, an internship is the only way to join as a Full-Time Employee at Mitt Arv. Our recruitment process is designed to assess candidates based on their skills, knowledge, intent, commitment, and adaptability.

Our company recognises that employee retention is critical to our success. We provide competitive stipends & salaries, benefits, and opportunities for growth and development. We offer a supportive environment that promotes work-life balance. We conduct regular performance reviews and provide employees with feedback on their performance, goals, and development needs. We work with employees to create plans that help them achieve their career goals.

Internship Structure

Internship Training Period: This lasts for **6 to 8 weeks**, depending on your *performance, intent, ability, and dedication*. If you are unable to complete your internship 'Training Period' within 8 weeks, we will **not be able** to continue our association with you thereafter.

Post-Training Internship: The total internship period, including training, lasts for a **minimum of 4 months**. This duration is **mandatory** to be eligible for an FTE, PPO offer, or **even an internship certificate**. If you haven't yet completed your graduation or are not in your final year of graduation yet, we offer an 'intern till you graduate' program, where you can intern with us until you complete your graduation.

Meanwhile, if you are a non-final year student selected for this internship, we can onboard you remotely **but** you will have to spend your mid semester breaks with our Hyderabad office till you complete **3 months in aggregate**, to be eligible for an Internship certificate. Thereafter, to be eligible for a PPO or FTE offer, you have to spend 4 continuous months of your final year working from our Hyderabad office.

Internship Location and Office Timings

You must spend the entire internship time working from our Hyderabad office. Our office is open from 10 AM - 7 PM and operates from Monday to Friday. If you are in your non-final year, the Internship Structure clause applies.

Full-Time Employment or Pre-Placement Offer

Based on your performance during the internship, and finding a mutual fit for working together, Mitt Arv will offer a Full-Time Employment or a Pre-Placement Offer in the range of 3 LPA to 6 LPA.

Stipend Structure

Our Tech stipend structure is competitive, yet uniquely designed. You will learn more about sprints etc during your internship 'Training Period'. The following is our detailed Stipend Structure

Level	Criteria	Basic Stipend p.m. (in INR)	Per Sprint participation Incentive (max 2 p.m.)	Monthly Total (Full Participation)	Quarterly Bonus (% of 3 months stipend)	Monthly Average range (Over 3 months, at par bonus)
Training	At Joining	4,000	-	4,000	-	-
Level 1	1st Year	3,000	1,500	6,000	25%	7,500
Level 2	2nd Year	4,000	2,000	8,000	25%	10,000
Level 3	3 rd Year and later	5,000	2,500	10,000	25%	12,500

* Quarterly Bonus will be calculated on a calendar quarter basis. It will be in the range of 60% to 150% based on performance (100% for at par performance). E.g., at 100% performance, a level 3 intern will get an additional 25% of quarterly stipend as bonus which is 9,000 ends of the quarter (assuming full participation in all 3 months).

** The levels defined here are at time of joining and post training completion. After that, level promotion can happen independent of criteria mentioned above, purely based on performance.

Relocation Assistance

If you reside outside of Hyderabad and are relocating for the internship, you will be provided with reimbursement for up to 2AC return tickets to and from your base location. Additionally, you will also be provided with additional INR 6,000 monthly on a prorated basis to assist with additional costs. We will be able to support your stay at a nearby guest house but the costs will have to be borne by you if you choose to opt for them.

Roles & Responsibilities

1. Work closely with cross-functional teams, including designers, product managers, and QA engineers, to deliver high-quality software solutions.
2. Write efficient, reusable, and scalable code using ReactJS for web development and Flutter for cross-platform mobile app development.
3. Ensure a seamless and responsive user experience across various devices and screen sizes.
4. Design and implement server-side logic, ensuring high performance and responsiveness.
5. Develop and maintain APIs for seamless communication between the frontend and backend systems.
6. Ensure data security, integrity, and optimal performance through efficient database design and maintenance.

ASSIGNMENT

We heavily rely on processes and guidelines as we work. One core aspect of any good technology team is to understand the requirements, so please go through the below requirements thoroughly. Any major miss in complying to the guidelines for submission, subject of email etc will automatically disqualify your application.

Assignment Submission Instructions

Your submissions for the assignment details laid out below should be sent via email to careers@mittarv.com with the following guidelines:

- Email Subject Format: “<Your Name> - Application for Software Engineering Internship”
- All submissions must be in the form of a pdf attachment OR URLs with public access enabled.
- Each attachment should have a filename “<Your Name> - Software Engineering Internship Assignment Attachment <x> of <y>”
- Kindly abide by the deadline mentioned in the Job Post on Internshala.

Assignment Details

You need to submit

Q1. Assignment- ReactJS:

Design and develop a Kanban board in ReactJS that allows users to manage tasks across different stages: To Do, In Progress, Peer Review, and Done. The board should support drag-and-drop functionality for task movement and a search box to filter tasks by title.

Requirements:

Kanban Board Layout:

Four sections/columns representing task stages:

- To Do
- In Progress
- Peer Review
- Done

Each section should display tasks relevant to that stage.

Task Cards:

- Each task card should display:
 - Task Title
 - Task Description (shortened to fit in the card)
- Tasks should be draggable between columns.

Drag and Drop Functionality:

- Implement drag-and-drop functionality to move tasks between columns.
- Ensure that tasks can be dragged from one column to any other and placed in the correct position.

Search Functionality:

- Implement a search bar at the top of the board.
- Filter tasks in all columns based on the search input.
- Display matching tasks and hide non-matching tasks as the user types in the search bar.

Add New Tasks:

- Implement a floating button to create new tasks, which should only allow creation in the To Do column.
- The task creation form should include:
 - Task Title
 - Task Description

Optional Components:

1. Consuming any external services
2. Storing / retrieving information from any database (you will need to share the DB Credentials in this case for the review purposes) or you can use local storage.

Best practices :

- Use Redux or any other state management tool throughout your application.
- Write a clean, well documented code with meaning full variable name and comments whenever possible.
- The UI should be fully responsive.
- Maintain a clear and organised folder structure.
- You can use any external UI library for styling for ex: MUI. Also feel Free to use any Vector / SVG icons
- Readme File - A readme file explaining how to set up and run the application.

Q2. Assignment- Flutter:

Design, Develop a E-commerce Application using flutter which is capable of handling the following:

Homepage:

- Display a list of featured products with their images, names, prices, and ratings.
- Only 10 products should be displayed initially. Additional products should be fetched as the user scrolls down (infinite scrolling).

Product Detail Page :

- Display detailed information about a product when a user clicks on it. This should include images, name, price, description, ratings, and reviews.

Product Search Functionality :

- Implement a search functionality where users can search for products by typing the product name.
- Display search results with product image, name, price, and rating.

User Authentication :

- Implement login and logout functionality.
- Validate user registration details, including name, email, phone number, and password.

Product sort functionality :

- Allow users to sort products by price, popularity, and rating.
- Implement filtering options for categories, price ranges, and ratings.

Cart Functionality:

- Users should be able to add and remove products from their cart.
- Display the cart with a list of added products, quantities, and total price.
- Implement a checkout button that takes the user to a checkout page.

For Data use this API –

Integrate the frontend and fetch the data from API – <https://fakestoreapi.com/> as per the requirements.

Best practices to be followed :

- Use a state management package that fits as per your project's needs.
- Write a clean, well documented code with meaning full variable name and comments whenever possible.
- Structure your project to separate business logic from UI code. Use a clean architecture pattern to keep your code modular, testable, and maintainable.
- The UI should be responsive and well maintained.
- Readme File - A readme file explaining how to set up and run the application.

Q3. Assignment – Security Bug Bounty:

As Mitt Arv is in Beta Phase, we are inviting you to try and highlight the security vulnerabilities which are present. As part of this you will be required to submit a video highlighting any vulnerabilities you find. The app is only available on Android currently and you can use the referral code **2402ASMT** to register on the app.

Assignment Scoring Guidelines (for Assignments 1 & 2):

Following artefacts to be submitted to mark completion of assignment. Each item is non-negotiable. Scores for each section is 5 marks.

1. Share the code in your personal GitHub repository. Following things to be noted:
 - a. There must not be any build exception
 - b. Code must be checked-in from **your** GITHUB account
2. Coding practices must be followed
 - a. Ensure you are following consistent coding practices
 - b. Comments must be written access the code
 - c. Code must be factored in an optimal way for performance and maintenance
3. Word or PDF document highlighting the testing which you have carried out:
 - a. The specific screenshots must be on android emulator
 - b. View from Chrome browser must also be shared

Final Scoring Grid:

Topic	
Flutter Assignment (Score 5×3) (Max 15) a. GitHub Repository a. Coding Practices a. Documentation	
React Assignment (Score 5×3) (Max 15) a. GitHub Repository a. Coding Practices a. Documentation	
Bug Bounty (Max 20) a. Detailed Steps (Score 10) a. Documentation (Score 5) a. Proposed Fix (Score 5)	
Grand Total	

Note:

1. To proceed to the next round, you need to secure a minimum score of 20 and above.
2. If we find the code among more than one applicant is copied, then it will lead to immediate disqualification for each of those applicants.