

## Project Planning for IMovies Application

### Project Information

Date	April 10, 2025
Team ID	SWTID1743003805
Project Name	IMovies - Movie Ticket Booking Application
Maximum Marks	5 Marks

### Agile Terminology

- **Sprint:** Fixed period or duration in which a team works to complete a set of tasks
- **Epic:** A big task or project that is too large to complete in one sprint; broken down into smaller tasks (stories)
- **Story:** A small task that is part of an Epic
- **Story Points:** A number that represents how much effort a story takes to complete (usually in Fibonacci series)
  - 1: Very Easy task
  - 2: Easy task
  - 3: Moderate task
  - 5: Difficult task
  - 8: Very difficult task

### Product Backlog and Sprint Schedule

#### Sprint 1: Setup and Basic Functionality

Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
User Authentication	USN-001	As a user, I can register for the application by entering my username, email, and password	2	High	2
User Authentication	USN-002	As a user, I can log into the application using my email and password	1	High	2
User Authentication	USN-003	As a user, I can recover my password if I forget it	2	Medium	1
Movie Management	USN-004	As a user, I can view a list of available movies with details	3	High	3
Movie	USN-005	As a user, I can search for	5	Medium	4

Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Management		movies by title, genre, or release date			
Movie Management	USN-006	As a user, I can view detailed information about a specific movie	2	High	3
<b>Sprint 1 Total</b>			<b>15</b>		

### **Sprint 2: Core Booking Functionality**

Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Cinema Selection	USN-007	As a user, I can select a cinema location to view available movies	3	High	1
Cinema Selection	USN-008	As a user, I can view theater details including location and facilities	2	Medium	1
Showtime Selection	USN-009	As a user, I can select a showtime for my chosen movie and cinema	3	High	2
Seat Selection	USN-010	As a user, I can view a visual representation of the seating layout	5	High	4
Seat Selection	USN-011	As a user, I can select and deselect seats from the available options	3	High	4
<b>Sprint 2 Total</b>			<b>16</b>		

### **Sprint 3: Booking Management and User Features**

Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Booking Process	USN-012	As a user, I can proceed to payment after selecting seats	5	High	4
Booking Process	USN-013	As a user, I can receive a booking confirmation with details	3	High	4
User Profile	USN-014	As a user, I can view and	3	Medium	3

Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
		update my profile information			
User Profile	USN-015	As a user, I can view my booking history	3	High	3
Favorites	USN-016	As a user, I can add movies to my favorites list	2	Medium	3
Favorites	USN-017	As a user, I can view and manage my favorites list	2	Medium	4
<b>Sprint 3 Total</b>			<b>18</b>		

#### **Sprint 4: Admin Functionality and Polish**

Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Admin Management	USN-018	As an admin, I can add and edit movie details	5	High	2
Admin Management	USN-019	As an admin, I can manage theaters and seating layouts	5	High	2
Admin Management	USN-020	As an admin, I can create and manage showtimes	3	High	1
UI/UX Refinement	USN-021	Ensure responsive design across all device types	3	Medium	1
UI/UX Refinement	USN-022	Implement final design polishing and consistency checks	3	Low	2
<b>Sprint 4 Total</b>			<b>19</b>		

## Project Tracker

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)
Sprint 1	15	10 Days	April 12, 2025	April 21, 2025	15
Sprint 2	16	10 Days	April 22, 2025	May 1, 2025	16
Sprint 3	18	10 Days	May 2, 2025	May 11, 2025	19
Sprint 4	19	10 Days	May 12, 2025	May 21, 2025	19

## Velocity Calculation

After Sprint 1 completion - Sprint 1: 15 story points completed in 10 days –

Velocity: 15 points per sprint - Average Velocity (AV) per day:  $15/10 = 1.5$  story points per day

After Sprint 2 completion: - Sprint 2: 16 story points completed - Total: 31

story points completed in 2 sprints - Velocity:  $31/2 = 15.5$  story points per sprint -

Average Velocity (AV) per day:  $15.5/10 = 1.55$  story points per day

## Burndown Chart

The burndown chart will track remaining story points over time within each sprint. It should be updated daily to reflect actual progress against the planned timeline.

in Sprint 1 with 15 total story points over 10 days: - Ideal burndown: 1.5 points per day - Day 1:  $15 - 1.5 = 13.5$  points remaining (ideal) - Day 2:  $13.5 - 1.5 = 12$  points remaining (ideal) - ... - Day 10:  $1.5 - 1.5 = 0$  points remaining (ideal)

## Notes

1. Story points have been assigned using the Fibonacci sequence (1, 2, 3, 5, 8) to represent increasing complexity
2. Priorities are set as High, Medium, or Low based on business value and dependencies
3. Team velocity will be recalculated after each sprint to improve estimation accuracy
4. Daily standup meetings will help identify any blockers and adjust the sprint plan as needed

5. Burndown charts will be updated daily to visualize progress and forecast completion