PRODUCT BACKLOG FOR ATLSCAN APP

This document outlines the product backlog for the Atlascan App. The backlog includes epics, user stories, and tasks necessary to build a robust, cloud-native OCR mobile application. The app is designed to extract key information, such as ID numbers, from identification documents uploaded via file upload or camera capture, and to autofill web forms with this data.

1- EPIC: USER AUTHENTICATION & ONBOARDING

USER STORY 1: SECURE LOGIN AND REGISTRATION

As a user, I want to register/login securely so that my data remains private and accessible only to me.

TASKS:

- Implement user registration (email/password, social login).
- Implement authentication flow (login, logout, reset password).
- Integrate OAuth/JWT for secure token-based authentication.
- Add validation for passwords, emails, and security prompts.

USER STORY 2: ONBOARDING FLOW – **(OPTIONAL)**

As a user, I want to see a user-friendly onboarding tutorial so that I understand how to use the app.

TASKS:

- Create a multi-step onboarding flow.
- Add animated tooltips for document uploads and scanning.

2- EPIC: DOCUMENT CAPTURE & UPLOAD

USER STORY 1: UPLOAD ID DOCUMENT

As a user, I want to upload images of my ID so the app can extract key information.

TASKS:

- Add support for image file uploads (PNG, JPEG, PDF).
- Validate file size and image quality.
- Add preview option to review uploaded images.

USER STORY 2: CAMERA CAPTURE

As a user, I want to capture ID images using my phone camera for easy, real-time uploads.

TASKS:

- Implement camera integration (real-time image capture).
- Add image enhancement features (auto-crop, brightness adjustment, deskew).

- Add an option to retake images before submission.

USER STORY 3: MULTI-PAGE DOCUMENT SCANNING

As a user, I want to capture multi-page documents.

TASKS:

- Enable multi-page document scanning.
- Display progress indicators for multi-page uploads.

3- EPIC: OCR & DATA EXTRACTION

USER STORY 1: EXTRACT KEY INFORMATION

As a user, I want the app to recognize and extract key information (like ID number) from uploaded documents.

TASKS:

- Integrate OCR using Tesseract or PaddleOCR
- Preprocess images for better accuracy (brightness, contrast, noise reduction).
- Set up image-to-text parsing logic (detecting name, date of birth, ID number, etc.).
- Handle multiple document templates/formats.

USER STORY 2: EDIT EXTRACTED DATA

As a user, I want to review and correct the extracted information if needed.

TASKS:

- Display the extracted information in a preview form.
- Allow users to edit incorrect fields.
- Add highlighted text overlay on the image showing where the text was detected.

4- EPIC: DATA TRANSFER & FORM AUTOFILL

USER STORY 1: AUTOFILL WEB FORMS

As a user, I want the app to automatically fill out my web form using extracted data from my ID.

TASKS:

- Create a data mapping engine to match extracted fields to web form fields.
- Integrate a secure API to transfer data from mobile to web form.
- Create a form preview screen for users to see the completed form before submission.