Ethical Impact Assessment Checklist

1. Data Privacy and Security

Objective: Ensure that data used and generated by the AI system is handled securely and respects user privacy.

Checklist Item	Completed	Notes

Data Collection:

- [ ] What types of data are being collected?

- [ ] Is data collection necessary and minimized to what is required?

- [ ] Have you obtained informed consent from data subjects?

Data Storage:

- [ ] How is data stored and protected against unauthorized access?

- [ ] Are encryption and other security measures implemented?

Data Usage:

- [ ] How is the data being used within the AI system?

- [ ] Are there policies for data retention and deletion?

Compliance:

- [ ] Does data handling comply with relevant data protection laws (e.g., GDPR, CCPA)?

- [ ] Have data protection impact assessments (DPIAs) been conducted?

Anonymization:

- [ ] Is personal data anonymized or pseudonymized where possible?

- [ ] Are there safeguards against re-identification?

2. Fairness and Bias

Objective: Prevent and mitigate biases in AI systems to ensure equitable treatment of all users and stakeholders.

Checklist Item	Completed	Notes

Data Bias:

- [ ] Is the training data representative of diverse populations?

- [ ] Have you identified and addressed potential biases in the dataset?

Algorithmic Fairness:

- [ ] Are fairness metrics defined and measured (e.g., demographic parity, equal opportunity)?

- [ ] Have you tested the AI system for disparate impact across different groups?

Decision-Making:

- [ ] Does the AI system make decisions that could disproportionately affect certain groups?

- [ ] Are there mechanisms to correct biased outcomes?

Inclusive Design:

- [ ] Were diverse perspectives considered during the design and development phases?

Checklist Item	Completed	Notes

- [ ] Is there ongoing monitoring to detect and address emerging biases?

3. Transparency and Explainability

Objective: Ensure that AI systems are understandable and that their decision-making processes are transparent to users and stakeholders.

Checklist Item	Completed	Notes

Model Transparency:

- [ ] Is the AI model architecture documented and accessible?

- [ ] Are the data sources and preprocessing steps clearly described?

Explainability:

- [ ] Can the AI system provide explanations for its decisions in understandable terms?

- [ ] Are there tools or methods in place to generate explanations (e.g., LIME, SHAP)?

User Communication:

- [ ] Are users informed when they are interacting with an AI system?

- [ ] Is there clear documentation on how the AI system works and its intended use?

Transparency Reporting:

- [ ] Have you published transparency reports detailing the AI system's performance and limitations?

- [ ] Are audit trails maintained for decision-making processes?

4. Accountability

Objective: Establish clear lines of responsibility and mechanisms for accountability in the deployment and operation of AI systems.

Checklist Item	Completed	Notes

Responsibility Assignment:

- [ ] Who is responsible for the development, deployment, and maintenance of the AI system?

- [ ] Are roles and responsibilities clearly defined within the team?

Governance Framework:

- [ ] Is there an ethical governance framework in place for overseeing AI development?

- [ ] Are there policies for addressing ethical breaches or issues?

Auditing and Monitoring:

- [ ] Are regular audits conducted to assess compliance with ethical standards?

- [ ] Is there continuous monitoring of the AI system's performance and impact?

Liability and Redress:

- [ ] Are there mechanisms for users to report issues or grievances related to the AI system?

- [ ] Is there a process for addressing and rectifying identified problems?

5. Human Control and Autonomy

Objective: Preserve human agency and ensure that AI systems augment rather than undermine human decision-making.

Checklist Item	Completed	Notes

Human Oversight:

- [ ] Can humans intervene in the AI system's decision-making process?

- [ ] Are there safeguards to prevent unauthorized automated actions?

Autonomy Levels:

- [ ] What level of autonomy does the AI system possess, and is it appropriate for its intended use?

- [ ] Are users aware of the AI system's autonomy and limitations?

User Empowerment:

- [ ] Are users provided with options to override or modify AI-driven decisions?

- [ ] Is there training or support to help users effectively interact with the AI system?

Ethical Guidelines:

- [ ] Does the AI system adhere to ethical guidelines that prioritize human well-being and autonomy?

- [ ] Are there mechanisms to evaluate and enhance human-AI collaboration?

6. Societal and Environmental Impact

Objective: Assess and mitigate the broader societal and environmental consequences of deploying AI systems.

Checklist Item	Completed	Notes

Social Impact:

- [ ] How does the AI system affect different segments of society?

- [ ] Are there potential impacts on employment, privacy, or social dynamics?

Environmental Sustainability:

- [ ] What is the environmental footprint of developing and operating the AI system?

- [ ] Are there strategies to minimize energy consumption and resource use?

Economic Considerations:

- [ ] Does the AI system contribute to economic inequality or provide equitable benefits?

- [ ] Are there measures to ensure fair distribution of AI-driven economic gains?

Cultural Sensitivity:

- [ ] Does the AI system respect and accommodate cultural differences and norms?

- [ ] Are there assessments of potential cultural biases or insensitivities?