

1. HTML & CSS

```
<!doctype html>
<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>SIPERPUS - Tambah Buku</title>
    <link
href="https://cdn.jsdelivrivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css"
rel="stylesheet"
integrity="sha384-
QWTKZyjpPEjISv5WaRU90FeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH"
crossorigin="anonymous">

    <style>
        body {
            height: 100vh;
            width: 100vw;
        }

        textarea {
            height: 5rem;
        }

        .pendek {
            width: 5rem;
        }

        .btn-custom {
            width: 8rem;
        }

        .form {
            width: 60vw;
        }

        .div-btn {
            width: 50%;
        }

        @media (max-width: 576px) {
            .form {
                width: 80vw;
            }

            .btn-custom {
                width: 5rem;
            }
        }
    </style>

```

```

    }

    .div-btn {
        width: 66%;
    }
}
</style>
</head>

<body>
    <div class="d-flex justify-content-center align-items-center h-100 w-100">
        <form class="form" onsubmit="alert(`Berhasil Menambahkan Buku`)">
            <h2 class="text-center mb-3">TAMBAH BUKU</h2>
            <div class="mb-3 d-flex align-items-center row">
                <label class="col-4 col-md-6 text-end">Judul Buku : </label>
                <textarea class="col-8 col-md-6" required></textarea>
            </div>
            <div class="mb-3 row d-flex">
                <label class="col-4 col-md-6 text-end align-middle">ISBN :
</label>
                <input type="number" class="col-8 col-md-6" required>
            </div>
            <div class="mb-3 row d-flex align-items-center">
                <label class="col-4 col-md-6 text-end">Kategori : </label>
                <select class="col-8 col-md-6" required>
                    <option selected value="1">Fiksi</option>
                    <option value="2">Non Fiksi</option>
                    <option value="3">Teknologi</option>
                    <option value="4">Sejarah</option>
                    <option value="5">Kesehatan</option>
                </select>
            </div>
            <div class="mb-3 row d-flex">
                <label class="col-4 col-md-6 text-end align-middle">Pengarang
: </label>
                <input type="text" class="col-8 col-md-6" required>
            </div>
            <div class="mb-3 row d-flex">
                <label class="col-4 col-md-6 text-end align-middle">Penerbit :
</label>
                <input type="text" class="col-8 col-md-6" required>
            </div>
            <div class="mb-3 row d-flex">
                <label class="col-4 col-md-6 text-end align-middle">Tahun
Terbit : </label>
                <input type="number" class="ms-1 pendek col-8 col-md-6"
required>
            </div>
        </form>
    </div>

```

```
        <div class="mb-3 row d-flex">
            <label class="col-4 col-md-6 text-end align-middle">Jumlah
Buku Tersedia : </label>
            <input type="number" class="ms-1 pendek col-8 col-md-6"
required>
        </div>
        <div class="d-flex w-100 justify-content-end">
            <div class="div-btn">
                <button type="submit" class="btn btn-success btn-custom
me-2">Simpan</button>
                <button type="button" class="btn btn-danger btn-custom"
onclick="alert(`Batal Menambahkan
Buku`)">Batal</button>
            </div>
        </div>
    </form>
</div>

<script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.8/dist/umd/popper.min.js
"
    integrity="sha384-
I7E8VVD/ismYTF4hNIPjVp/Zjvgyol6VFvRkX/vR+Vc4jQkC+hVqc2pM80Dewa9r"
    crossorigin="anonymous"></script>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min
.js"
    integrity="sha384-
YvpcrYf0tY3lHB60NNkmXc5s9fDVZLESaAA55NDz0xhy9GkcIdslK1eN7N6jIeHz"
    crossorigin="anonymous"></script>
</body>

</html>
```

2. SQL

-- INITIAL DATA

INSERT INTO Kategori (nama) VALUES

('Fiksi'),

('Non-Fiksi'),

('Teknologi'),

('Sejarah'),

('Kesehatan');

```
INSERT INTO User (nama, alamat, no_ktp, no_hp, email) VALUES
```

```
('User 1', 'Jl. Pinang', '1234567890123456', '081234567890', 'user1@gmail.com'),  
( 'User 2', 'Jl. Belimbing', '2345678901234567', '082345678901', 'user2@gmail.com'),  
( 'User 3', 'Jl. Sengon', '3456789012345678', '083456789012', 'user3@gmail.com'),  
( 'User 4', 'Jl. Kedondong', '4567890123456789', '084567890123', 'user4@gmail.com'),  
( 'User 5', 'Jl. Sultan', '5678901234567890', '085678901234', 'user5@gmail.com');
```

```
INSERT INTO Buku (judul, pengarang, penerbit, isbn, tahun_terbit, jumlah_tersedia, kategori_id)  
VALUES
```

```
('To Kill a Mockingbird', 'Harper Lee', 'J.B. Lippincott & Co.', '9780446310789', 1960, 5, 1),  
( '1984', 'George Orwell', 'Secker & Warburg', '9780451524935', 1949, 3, 1),  
( 'Sapiens: A Brief History of Humankind', 'Yuval Noah Harari', 'Harvill Secker', '9780062316097', 2011,  
4, 2),  
( 'Educated', 'Tara Westover', 'Random House', '9780399590504', 2018, 2, 2),  
( 'The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution',  
'Walter Isaacson', 'Simon & Schuster', '9781476708706', 2014, 6, 3),  
( 'Clean Code: A Handbook of Agile Software Craftsmanship', 'Robert C. Martin', 'Prentice Hall',  
'9780132350884', 2008, 7, 3),  
( 'Guns, Germs, and Steel: The Fates of Human Societies', 'Jared Diamond', 'W.W. Norton & Company',  
'9780393317558', 1997, 3, 4),  
( 'The History of the Ancient World: From the Earliest Accounts to the Fall of Rome', 'Susan Wise  
Bauer', 'W.W. Norton & Company', '9780393059748', 2007, 5, 4),  
( 'The China Study: The Most Comprehensive Study of Nutrition Ever Conducted', 'T. Colin Campbell',  
'BenBella Books', '9781932100662', 2005, 8, 5),  
( 'How Not to Die: Discover the Foods Scientifically Proven to Prevent and Reverse Disease', 'Michael  
Greger', 'Flatiron Books', '9781250066114', 2015, 1, 5);
```

```
INSERT INTO Peminjaman (anggota_id, buku_id, tanggal_pinjam, tanggal_batas_kembali,  
tanggal_kembali, denda) VALUES
```

```
(1, 1, '2024-01-01', '2024-01-15', '2024-01-10', 0),  
(1, 2, '2024-01-05', '2024-01-19', '2024-01-15', 0),  
(1, 3, '2024-01-10', '2024-01-24', '2024-01-20', 0),  
(2, 4, '2024-01-01', '2024-01-15', '2024-01-13', 0),
```

```
(2, 5, '2024-01-05', '2024-01-19', '2024-01-18', 0),  
(2, 6, '2024-01-10', '2024-01-24', '2024-01-22', 0),  
(3, 7, '2024-01-01', '2024-01-15', '2024-01-13', 0),  
(3, 8, '2024-01-05', '2024-01-19', '2024-01-17', 0),  
(3, 9, '2024-01-10', '2024-01-24', '2024-01-30', 6000);
```

-- MANIPULASI DATA

-- Tampilkan daftar buku yang tidak pernah dipinjam di oleh siapapun.

```
SELECT b.id, b.judul, b.pengarang, b.penerbit, b.isbn, b.tahun_terbit, b.jumlah_tersedia, k.nama AS  
kategori  
FROM Buku b  
LEFT JOIN Peminjaman p ON b.id = p.buku_id  
LEFT JOIN Kategori k ON b.kategori_id = k.id  
WHERE p.id IS NULL;
```

-- Tampilkan user yang pernah mengembalikan buku terlambat beserta dendanya

```
SELECT u.nama, b.judul, p.tanggal_pinjam, p.tanggal_batas_kembali, p.tanggal_kembali, p.denda  
FROM User u  
JOIN Peminjaman p ON u.id = p.anggota_id  
JOIN Buku b on b.id = p.buku_id  
WHERE p.tanggal_kembali > p.tanggal_batas_kembali AND p.denda > 0;
```

-- Tampilkan user dengan daftar buku yang dipinjamnya

```
SET @row_number = 0;  
SELECT @row_number := @row_number + 1 AS No, User, Buku  
FROM (SELECT u.nama AS User, GROUP_CONCAT(b.judul ORDER BY b.judul DESC SEPARATOR ', ') AS  
Buku FROM User u  
JOIN Peminjaman p ON u.id = p.anggota_id  
JOIN Buku b ON p.buku_id = b.id  
GROUP BY u.id, u.nama  
ORDER BY u.id ) AS subquery;
```

3. ALGORITHM

```
const HitungDenda = (
  tanggalKembali,
  tanggalPinjam,
  daftarBuku,
  batasMaxPeminjaman,
  dendaHarian
) => {
  let lamaPeminjaman = Math.abs(
    new Date(tanggalKembali) - new Date(tanggalPinjam)
  );
  lamaPeminjaman = Math.ceil(lamaPeminjaman / (1000 * 60 * 60 * 24));

  const telatHari = lamaPeminjaman - batasMaxPeminjaman;

  if (telatHari > 0) {
    const totalDenda = telatHari * daftarBuku.length * dendaHarian;
    console.log(
      `Anda telat mengembalikan ${daftarBuku.length} buku selama ${telatHari}
hari. Total denda Anda adalah Rp. ${totalDenda}`
    );
  } else {
    console.log(
      "Terimakasih sudah meminjam dan mengembalikan buku dengan tepat waktu"
    );
  }
};

HitungDenda("2024-08-30", "2024-08-10", ["satu", "dua", "tiga"], 14, 1000);
```