# Business Requirement Document For Mortgage Calculator

## 1. Purpose of the Document

The purpose of this document is to outline the business requirements for developing a Mortgage Eligibility Calculator for Nationwide. This calculator will allow users to get a rough idea of what you could borrow based on valid input parameters. The BRD is inspired by the functionality provided on the portal:

<https://www.nationwide.co.uk/mortgages/mortgage-calculators/borrowing-calculator/>

## 2. Scope

The Mortgage Eligibility and Repayment Calculator will:  
  
1. Your main income details

2. A rough idea of the property value

3. Your deposit or loan amount.

## 3. Business Objectives

1. Provide an easy-to-use tool for first-time buyers to estimate their mortgage affordability.  
2. Enhance customer engagement by simplifying the mortgage decision-making process.  
3. Increase lead generation by collecting basic user information.

## 4. Functional Requirements

Nationwide Mortgage Calculator portal link is <https://www.nationwide.co.uk/mortgages/mortgage-calculators/borrowing-calculator/>

**Process Details**:

1. **Buyer Details:**  
   The user selects Buyer Details as "Buy your first home", indicating they are purchasing a property for the first time.
2. **Property Price:**  
   The user enters the Property Price of €150,000 which forms the basis for determining their borrowing capacity.
3. **Deposit Amount:**  
   The user enters the Deposit Amount of €10,000, which forms the basis of the amount of money user can put towards the cost of new property.
4. **Length of Mortgage:**  
   The user inputs the Length of Mortgage as 10 years, which the calculator uses to assess the potential loan term and repayment options.
5. **Number of People on the Mortgage:**  
   The user inputs Number of People on the Mortgage as 1, which forms the basis for determining the maximum number of people who can apply for a Nationwide mortgage.
6. **Employment Status**:  
   The user inputs the Employment Status as Employed.
7. **Basic Income:**  
   The user enters the Basic Income of €5,000 which forms the basis for determining the yearly basic income before tax and National Insurance deductions.
8. **Get Results Trigger:**  
   The user clicks the "Get Results" button to initiate the computation of their maximum lending amount, and additional mortgage-related benefits.

## 5. Non-Functional Requirements

1. Performance: Results displayed within 2 seconds.  
2. Scalability: Handle up to 10,000 concurrent users.  
3. Accessibility: WCAG 2.1 compliance.  
4. Browser Compatibility: Support for major browsers.  
5. Security: Secure data handling; no sensitive data storage.

## 6. Acceptance Criteria

1. Correct computation of eligibility and repayments.  
2. Graceful handling of edge cases.  
3. Meaningful feedback for errors.  
4. Intuitive interface.  
5. Results align with business policies.

## 7. Assumptions and Constraints

1. Interest rates and income multipliers are subject to change.  
2. The calculator does not replace formal mortgage approval.  
3. Users are responsible for accurate data input.

## 8. Dependencies

1. Integration with regulatory/business-defined interest rate APIs.  
2. Hosting and deployment on the organization's web portal.