

```
"use strict";
```

```
let blindSignatures = require("blind-signatures");
```

```
let SpyAgency = require("./spyAgency.js").SpyAgency;
```

```
function makeDocument(coverName) {
```

```
    return The bearer of this signed document, ${coverName}, has full diplomatic immunity.;
```

```
}
```

```
function blind(msg, n, e) {
```

```
    return blindSignatures.blind({
```

```
        message: msg,
```

```
        N: n,
```

```
        E: e,
```

```
    });
```

```
}
```

```
function unblind(blindingFactor, sig, n) {
```

```
    return blindSignatures.unblind({
```

```
        signed: sig,
```

```
        N: n,
```

```
        r: blindingFactor,
```

```
    });
```

```
}
```

```
let agency = new SpyAgency();

// Prepare 10 documents with 10 different cover identities.

let documents = [];

let blindedDocs = [];

let blindingFactors = [];

for (let i = 0; i < 10; i++) {

  let coverName = CoverIdentity${i + 1};

  let doc = makeDocument(coverName);

  documents.push(doc);

  let { blinded, r } = blind(doc, agency.n, agency.e);

  blindedDocs.push(blinded);

  blindingFactors.push(r);

}

agency.signDocument(blindedDocs, (selected, verifyAndSign) => {

  let blindingFactorsForVerification = [];

  let originalDocsForVerification = [];

  // Populate arrays for verification, skipping the selected document

  for (let i = 0; i < 10; i++) {

    if (i === selected) {
```

```
    blindingFactorsForVerification.push(undefined);  
    originalDocsForVerification.push(undefined);  
  } else {  
    blindingFactorsForVerification.push(blindingFactors[i]);  
    originalDocsForVerification.push(documents[i]);  
  }  
}
```

```
// Call verifyAndSign function
```

```
let blindedSignature = verifyAndSign(  
  blindingFactorsForVerification,  
  originalDocsForVerification  
);
```

```
// Unblind the signature for the selected document
```

```
let unblindedSignature = unblind(  
  blindingFactors[selected],  
  blindedSignature,  
  agency.n  
);
```

```
// Validate the signature
```

```
let isValid = blindSignatures.verify({  
  unblinded: unblindedSignature,  
  message: documents[selected],
```

N: agency.n,

E: agency.e,

});

console.log(Document \${selected} signature is valid: \${isValid});

console.log(Signature: \${unblindedSignature});

});