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## Random Number Generator Certificate

Company: MBHiTech Solutions Private Limited

URL: [www.mbrummy.com](http://www.mbrummy.com)

This is to certify that MBHiTech RNG has evaluated & verified the Random Number Generator (RNG) used by MBHiTech Solutions Private Limited and found that the RNG complies with the relevant standards.\*

MBHiTech Solutions Private Limited requests the provided the source code files to MBHiTech RNG for evaluation as below.

BackgroundCycling.js

GameRandom.js

PseudoRandom.js

RandomNumberGenerator.js

MBHiTech's the Random Number Generator (RNG) uses the MT19937 algorithm which has a cycle of  $2^{19937}-1$  and has very good statistical properties. The RNG is initialized from a millisecond time of day and cycled between games. Scaling is unbiased.

The RNG uses a widely recognized algorithm to generate random numbers. The numbers generated by this RNG have passed Marsaglia's "diehard" tests for statistical randomness.

Our shuffling tests ensure randomness for all cards dealt from the shuffled decks (initial deck created before the game starts and the partial deck created from open cards). The shuffling tests were conducted on large enough samples to give the calculations sufficient statistical power.

MBHiTech has verified, through mathematical and statistic analysis, that the Random Number Generator (RNG) distributes number with fair distribution, lack of bias to particular outcomes and sufficient non predictability. All statistical tests passes at the 99% confidence interval level.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Mahadev Bhendekar'.

Mahadev Bhendekar

Director & Consultant

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